DOCUMENT RESUME

ED 422 693 EC 306 655

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TITLE Chartbook on Work and Disability in the United States, 1998.
INSTITUTION InfoUse, Berkeley, CA.
SPONS AGENCY National Inst. on Disability and Rehabilitation Research (ED/OSERS), Washington, DC.
PUB DATE 1998-00-00
NOTE 63p.
CONTRACT H133D50017-96
AVAILABLE FROM U.S. Department of Education, OSERS/NIDRR, Switzer Building, Room 3431, Washington, DC 20202; e-mail: david_keer@ed.gov; TDD: 800-877-8339; telephone: 202-205-5633; World Wide Web: http://www.ed.gov/offices/OSERS/NIDRR/pubs.html
PUB TYPE Numerical/Quantitative Data (110) -- Reference Materials - General (130)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Adults; Age Differences; Chronic Illness; *Disabilities; Economic Factors; *Employment; *Employment Level; *Employment Patterns; Employment Problems; *Employment Statistics; Federal Programs; Financial Support; Incidence; Income; Influences; Labor Force; *Labor Force Nonparticipants; Labor Utilization; National Surveys; Occupational Surveys; Participant Characteristics; Racial Differences; Severity (of Disability); Sex Differences; Work Environment

ABSTRACT

This document provides statistical information on the employment of people with disabilities. Data included in the book are derived from national surveys and other analyses by federal agencies. Each of the four sections in the publication address an aspect of work and disability. Section 1, "Prevalence of Disability among Working-age People," presents information on the definition of disabilities that are used, estimates of how many working-age people have a disability, and information on variations among the states in terms of rates of work disability. Section 2, "Work Disability and the Labor Force," examines patterns of work, types of employment, and earnings of people with disabilities who are in the labor force. Data on labor force participation by state, age, gender, and education are also presented. Section 3, "Factors Related to Work Disability," discusses what chronic health conditions are the most frequent causes of work limitation and how occupational injuries and illnesses affect work disability. The influence of demographic factors is also addressed. Section 4, "Work-related Resources," describes benefits from federal programs assisting people with a work disability. An appendix provides information on the sources of the data, and limitations of each source. (Contains 31 references.) (CR)

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CHARTBOOK ON WORK AND DISABILITY IN THE UNITED STATES, 1998

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National Institute on Disability and Rehabilitation Research

EC 306655

Chartbook on Work and Disability in the United States, 1998

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U. S. Department of Education
National Institute on Disability and Rehabilitation Research
Washington, D.C.
H133D50017-96

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This report was prepared under ED Grant #H133D50017-96. The views expressed herein are those of the grantee. No official endorsement by the U.S. Department of Education is intended or should be inferred.

Suggested Citation:

Stoddard, S., Jans, L., Ripple, J. and Kraus, L. (1998).
Chartbook on Work and Disability in the United States, 1998. An InfoUse Report.
Washington, D.C.: U.S. National Institute on Disability and Rehabilitation Research.

Foreword

The National Institute on Disability and Rehabilitation Research (NIDRR) is pleased to publish this Chartbook on Work and Disability. This book will be an important resource for persons needing information about people with disabilities and their work status. This is one in a series of publications, funded by NIDRR and produced by InfoUse, through its Center on Improving Access to Disability Data. This Center makes available in print and on the World Wide Web information derived from demographic information sources in an accessible, easy to read format, useable by people with a range of educational levels, technical skills, sensory disabilities and cognitive levels.

The topic of "work and disability" is of great importance to persons with disabilities, policymakers, advocates, planners, researchers, rehabilitation professionals and the public in general. The new paradigm of disability emphasizes the person with a disability acting in the environment and dealing with the opportunities and barriers he/she faces in making major life choices. Employment is a key factor in achieving independence and requires thorough investigation within the context of the compelling considerations relating to accommodations, accessibility and legal mandates.

Existing surveys often ignore the complexity of the person's interaction with his or her environment. There is a deficit in the amount of solid national data on the employment status of people with disabilities. This makes it difficult to assess the numbers of people working at different types of jobs, in different social settings, with different degrees of disability and different types of accommodations. This material is offered as an attempt to stimulate thinking on these interrelationships and on how we might move ahead to study "work and disability" in the 21st century.

Katherine D. Seelman, Ph.D., Director
National Institute on Disability and Rehabilitation Research

Acknowledgments

The *Chartbook on Work and Disability in the United States* relies on published data from several federal agencies and organizations. We are very grateful to all of the people and agencies who are responsible for collecting, maintaining and analyzing this data. The following people very graciously assisted us by providing current information:

- Bill Barron, Deputy Director, Bureau of Labor Statistics
- Barbara Bordelon, U. S. General Accounting Office
- Janice Devine, Bureau of Labor Statistics
- Rick Douglas, U. S. Department of Labor
- Brett Fallvollita, U. S. General Accounting Office
- Robert Ferguson, Social Security Administration
- Harvey Hamel, Bureau of Labor Statistics
- Jeff Kellar, Senior Economist, Bureau of Labor Statistics
- Mitchell P. LaPlante, Rehabilitation Research and Training Center on Disability Statistics
- Jack McNeil, Bureau of the Census
- Jane L. Ross, Director, U. S. General Accounting Office
- Zanne Tillman, Rehabilitation Services Administration
- Laura Trupin, Rehabilitation Research and Training Center on Disability Statistics
- Peter Wheeler, Social Security Administration
- Edward Yelin, Rehabilitation Research and Training Center on Disability Statistics

We also thank Sean Sweeney and David Keer, NIDRR Project Officers, who provided statistical materials and advice.

This chartbook is a product of the InfoUse Center on Improving Access to Disability Data, a program supported by a grant by the National Institute on Disability and Rehabilitation Research (H133D50017-96). This is one of a series of products and activities intended to make information on disability and on disability statistics available to wider audiences.

Preface

The *Chartbook on Work and Disability in the United States,* is a reference on work and disability in the United States population, created for use by both nontechnical and technical audiences. The book is a resource for agencies, employers, organizations, policymakers, researchers and others concerned with the relationship between disability and work.

Each section addresses an aspect of work and disability. Each page within the section contains a topic question, explanatory text on the topic and an explanatory graphic or table that provides data in an easy to read form. The source of the information and the survey used to collect the data appear at the bottom of the page. In many cases, we also include information on relevant URLs (website addresses) on the World Wide Web where more detailed information may be stored. The surveys have a technical summary which is located in the Appendix. In the text, key terms are shown in **bold** and are defined in the Glossary.

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Introduction

The relationship between disability and work is vital in today's policy environment. People with disabilities often encounter barriers to their entry into the work force and lack of accommodations on the job; many have difficulty obtaining appropriate training, education and job skills. These in turn contribute to low income levels, low labor force participation rates, and high levels of reliance on public benefits. At present funding levels, our public eligibility and entitlement programs cannot keep pace with the resulting demand for benefits. This chartbook provides information on key issues related to work and disability, contributing to the understanding of current employment issues faced by people with disabilities.

Data included in the *Chartbook on Work and Disability in the United States* includes information from national surveys such as the Survey of Income and Program Participation (SIPP), the National Health Interview Survey (NHIS), the Current Population Survey (CPS), the decennial Census, and the Annual Survey of Occupational Illnesses and Injuries (ASOII). In addition, other analyses by federal agencies such as the Bureau of Labor Statistics, the Social Security Administration, the Rehabilitation Services Administration and others will be summarized.

The chartbook is organized in four major sections:

Section 1 defines the terms used in our major national surveys that provide information on disability and work. Each major survey uses different definitions, and provides a different view of disability and work. Given that no one survey can provide a comprehensive understanding of the relationship between work and disability, we introduce several key information sources.

Section 2 addresses labor force participation of people with disabilities. The section examines patterns of occupation and work, and rates of employment of people with disabilities.

Section 3 examines major factors of work disability, including earnings, race, existence of chronic conditions, gender, and age.

Section 4 reviews a number of work-related resources available to people with disabilities, including Social Security disability insurance and Vocational Rehabilitation services.

Section 1. Prevalence of Disability Among Working-age People

This first section contains definitions and numbers to answer the most basic questions about the relationship between work and disability. Unfortunately, it is not a simple or straightforward matter to estimate the number of working-age people who have a disability. The three major national surveys that collect data on this topic differ in how they define disability, and the definitions that are used affect the estimates. In order to understand how many working-age people have a disability, it is important to understand how each of the major national surveys defines disability and measures the relationship between work and disability.

This section presents information on the definitions of disability that are used by each of the three major national surveys, as well estimates of how many working-age people have a disability, according to those definitions.

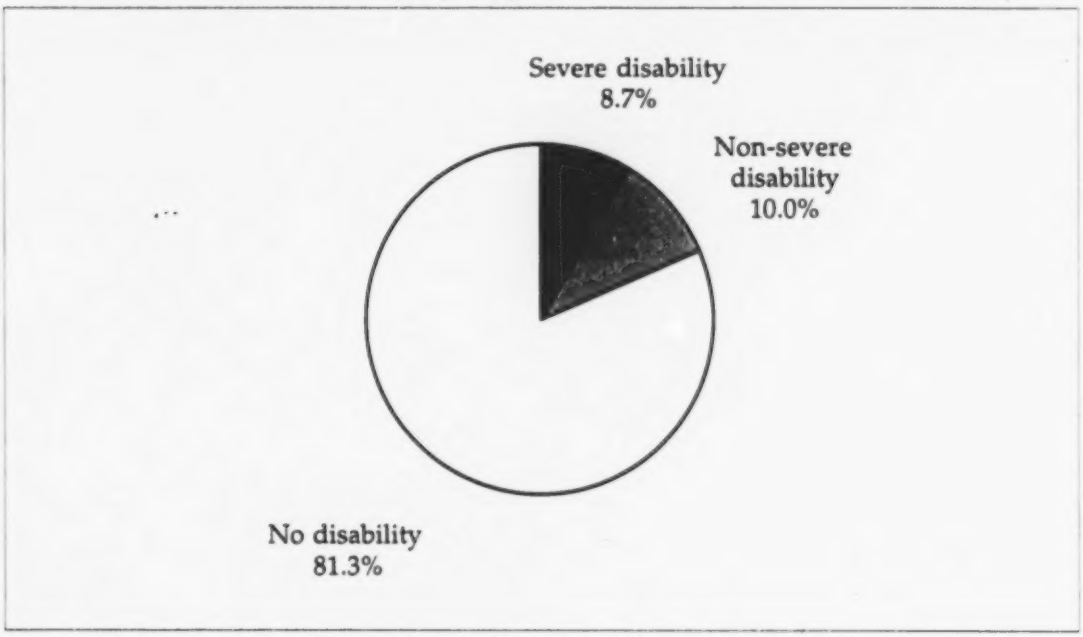
Section 1 also contains information on variations among the states in terms of rates of **work disability** (how many people have a condition that limits the amount or kind of work they can do).

How many working-age people in the United States have a disability?

According to the **Survey of Income and Program Participation (SIPP)**, 32 million working-age people (or 18.7% of the population age 15 to 64) have a disability. The SIPP provides an opportunity to examine disability and work using a definition of **disability** consistent with the Americans with Disabilities Act (ADA).

Compared to information from the **National Health Interview Survey** or the **Current Population Survey,** the **SIPP** definition of disability is more broad-based, covering a variety of limitations that may or may not be related to work. The SIPP definition clearly includes people who have reported being limited or unable to work as well as those who have qualified for a Social Security program based on inability to work. But the SIPP definition also includes people who use wheelchairs, report functional limitations or have other specified conditions, but may be fully employed and report no limitation in the amount or kind of work. Using the SIPP definitions, 18.7% of the working-age population 15-64 (32 million people) report a disability. Severe disabilities were reported by 8.7% (15 million); non-severe disabilities account for the other 10% (17 million).

Almost twenty percent of people ages 15-64 report some level of disability.



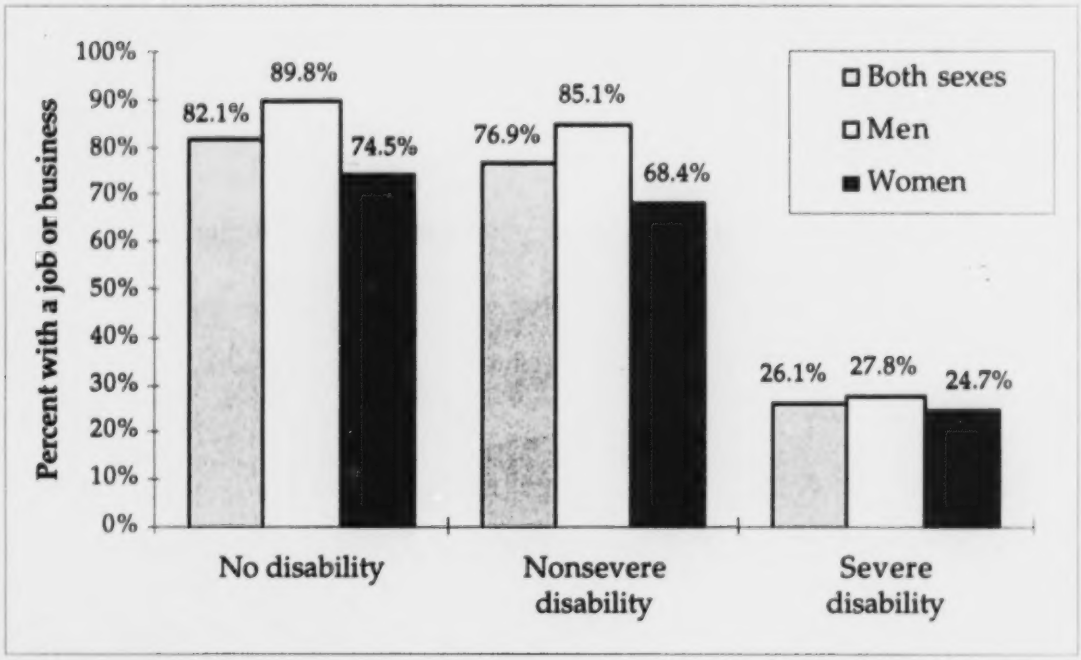
Source: McNeil (1997), Americans with Disabilities: 1994-95.
http://www.census.gov/hhes/www/disable.html
Survey: SIPP, 1994-95.

What percentage of people with a disability are employed?

People with a **disability** are less likely to have a job or business than people with no disability. For people ages 21 to 64 with no disability, the likelihood of having a job or business is 82.1%. For people with a non-severe disability, the rate is 76.9%; the rate drops to 26.1% for those with a severe disability.

The rates are lower for women than for men, regardless of disability status.

Employment is lower for people with a disability and much lower for those with a severe disability.



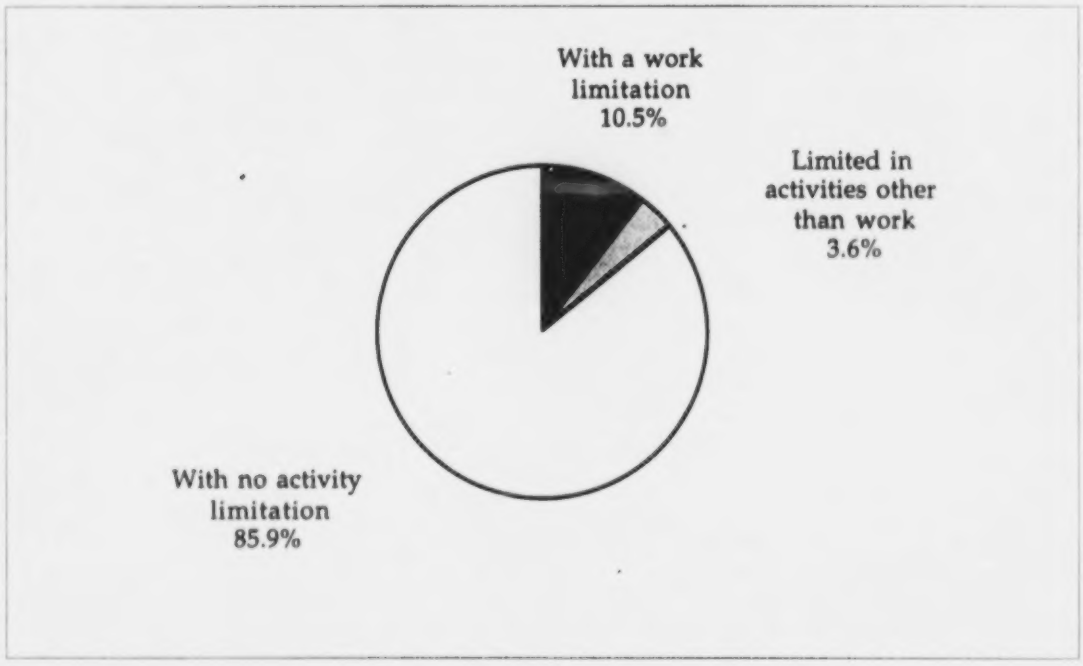
Source: McNeil (1997), Americans with Disabilities: 1994-95.
http://www.census.gov/hhes/www/disable.html
Survey: SIPP, 1994-95.

How many people have a work limitation?

According to the **National Health Interview Survey (NHIS),** 16.2 million working-age people have a work limitation (10.5% of the population, 18-64 years of age).

The NHIS measures the relationship between disability and work in a way that differs from the SIPP definition, and therefore yields different estimates of the numbers of working-age people who are disabled. The traditional measure of disability employed by the NHIS is based on questions about limitations in one's **major activity** due to a **chronic health condition.** For people 18 to 69 years of age, the major activity is defined as working at a job or business. Although the NHIS also asks questions about limitations in other activities, such as activities of daily living, instrumental activities of daily living, and needs for personal assistance, the questions about limitations in working at a job or business are most directly relevant to the topics of this publication, work and disability.

Over ten percent of working-age people report work limitation.



Source: LaPlante & Carlson (1996), Disability Statistics Report 7, Table 2, p. 66.
Survey: NHIS, 1992.

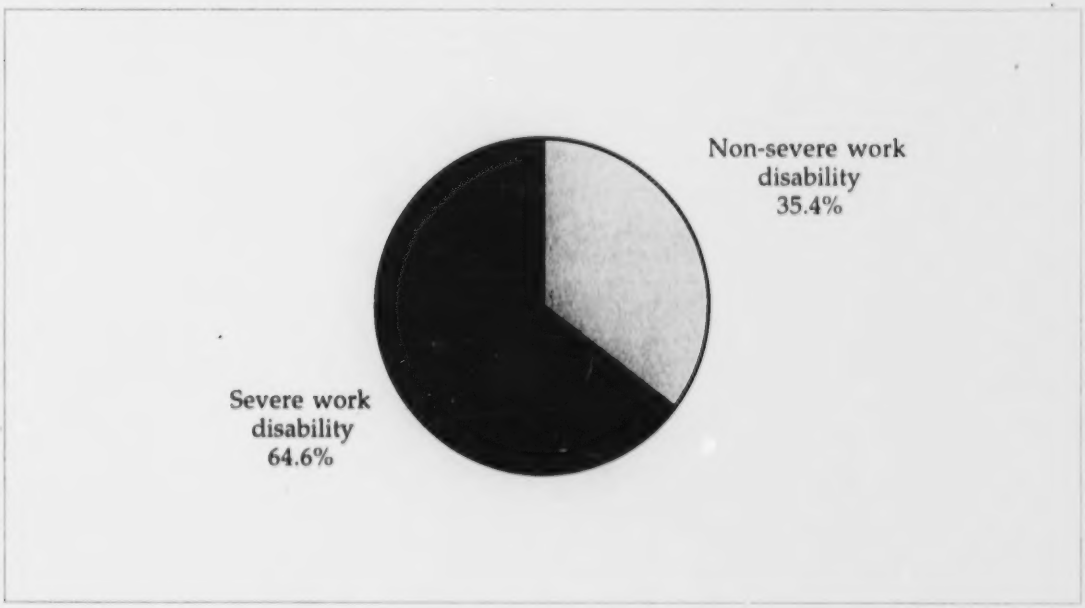
How many people have a work disability or a severe work disability?

The **Current Population Survey (CPS)** asks people whether they have a **work disability** (a condition that limits the kind or amount of work they can do) or a **severe work disability** (a condition that prevents them from working). According to this definition, 17.4 million people, or 10.2% of the 1997 working-age U.S. population ages 16-64 years, had a disability that prevents or limits work.

The CPS classifies persons as having a severe work disability if (1) they did not work in the survey week because of a long-term physical or mental illness that prevents the performance of any kind of work, (2) they did not work at all in the previous year because of illness or disability, (3) they were under 65 years of age and covered by Medicare, or (4) they were under 65 years of age and a recipient of Supplemental Security Income (SSI).

It is estimated that 11.3 million people of working age (16-64) have a severe work disability. Those with a severe work disability comprise 64.6% of the 17.4 million people with a work disability as measured by the CPS.

Nearly two-thirds of all work disabilities are severe.



Source: U. S. Bureau of the Census Website, Table 197.
http://www.census.gov/hhes/www/disable/cps
Survey: CPS, 1997.

How do the states differ in the numbers of people with a work disability?

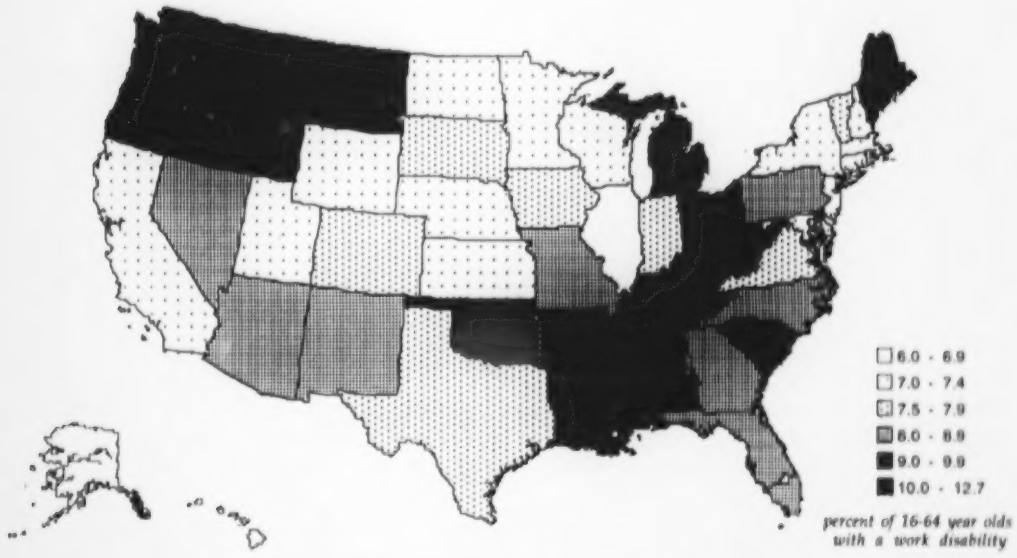
With the exception of Maine and Oregon, the states with the highest percentage of people with a work disability are in the southern United States. The eight states with the highest percentage of working-age persons with disabilities are ranked as follows:

12.6%	West Virginia	11.0%	Mississippi	10.2%	Oklahoma
11.4%	Kentucky	10.3%	Louisiana	10.0%	Oregon
11.2%	Arkansas	10.2%	Maine		

The five states with the lowest proportions of work disabilities are the following:

6.2%	New Jersey	6.6%	Alaska
6.4%	Connecticut	6.9%	Illinois
6.6%	Hawaii		

The highest rates of work disability are concentrated in the South.



Source: LaPlante & Cyril (1993), Disability Statistics Abstract #6, Table 1.
Survey: U.S. Bureau of the Census, 1990.

Section 2. Work Disability and the Labor Force

Disability has a large impact on participation in the labor force. Although many people with disabilities are not employed at all, many do participate in the labor force. That is, they are working or are looking for work. While Section 1 presented information on the overall population of people with disabilities, this section focuses on people with disabilities who participate in the labor force. In particular, we examine the patterns of work, types of employment, and earnings of people with disabilities who are in the labor force.

Data on labor force participation by state, age, gender, and education are also presented.

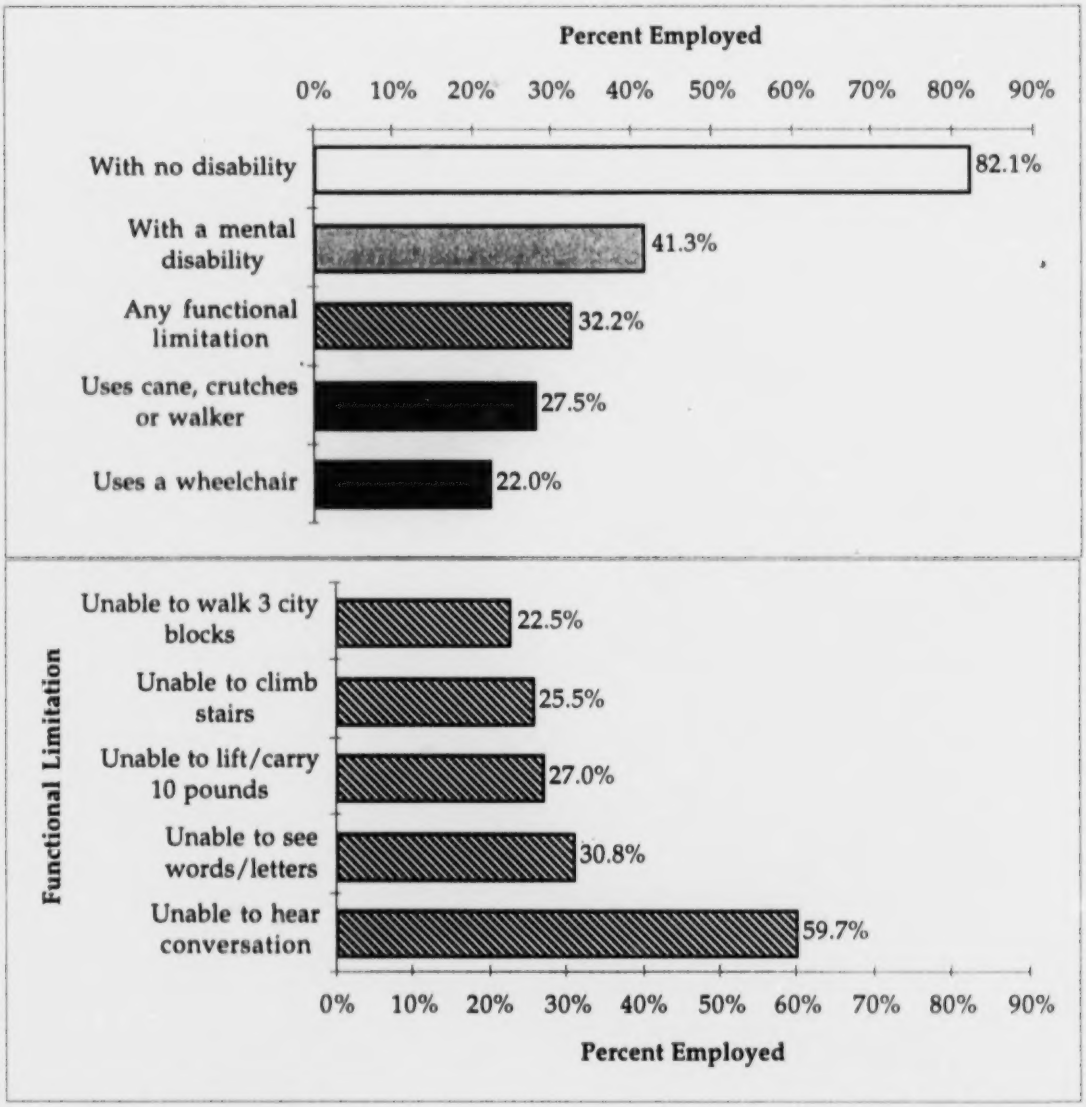
How does employment status differ for people with different disabilities or functional limitations?

The likelihood of employment varies significantly among people with different disabilities and different **functional limitations.** The **SIPP** includes information about whether a person uses a wheelchair, has used a cane, crutches or walker for at least 6 months, or has a mental disability. Functional limitations as measured by the SIPP include the ability to perform specific sensory and physical activities such as seeing ordinary newspaper print, hearing normal conversation, having speech understood, lifting or carrying 10 pounds, walking a quarter of a mile without resting, climbing a flight of stairs without resting, getting around outside or inside, or getting into and out of bed.

Among people with no disability, 82.1% are employed. The percentage employed drops sharply for people with different functional limitations and other disabilities. Of those with mental disabilities, 41.3% are employed. The percentage employed is even lower for people with mobility impairments, including those who use a cane, crutches, or walker (27.5%) or a wheelchair (22%).

Among people who have any functional limitations, 32.2% are employed. There is great variation in employment, depending on the type of limitation, with lower rates in mobility-related impairments. People unable to walk 3 city blocks have 22.5% employment. Employment for people unable to climb stairs is 25.5%; for those unable to lift or carry 10 pounds, 27%; for people with visual impairments (unable to see words or letters), 30.8%; and for those unable to hear conversation, 59.7%.

Employment is lowest for people with mobility impairments.

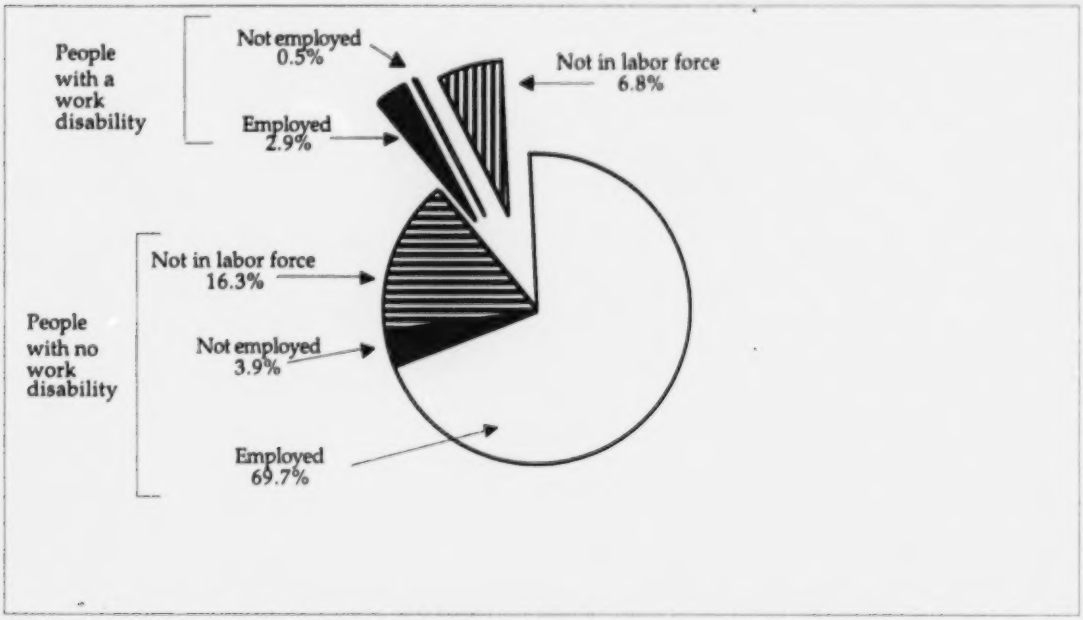


Source: McNeil (1997), Table 2.
Survey: SIPP, 1994-95.

How many people with a work disability are in the labor force?

Most of the population with a **work disability** are not in the **labor force**. Of the 17.4 million people between the ages of 16 and 64 who have a work disability, only 33.1% (5.7 million people) are in the labor force, and the unemployment rate among those in the labor force is 13.6%. In contrast, of the 153.2 million people with no work disability, 81.9% (125.5 million) are in the labor force, while the unemployment rate is only 5.3%.

More than two-thirds of people with a work disability are not in the labor force.



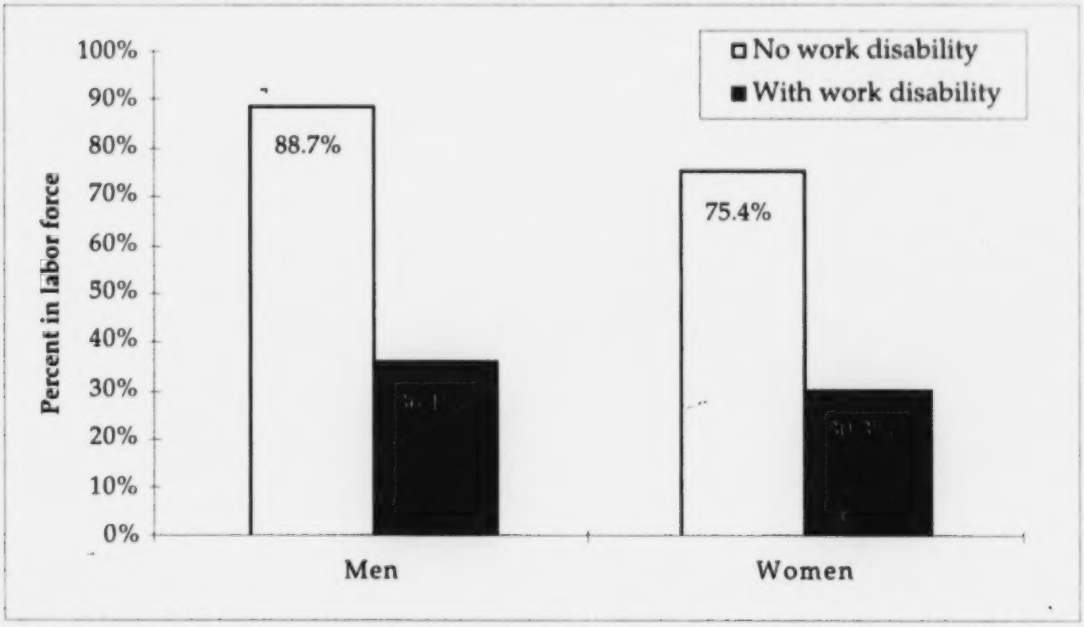
	Work Disability		No Work Disability	
	Number	Percent of Total	Number	Percent of Total
Not in Labor Force	**11,655,318**	**66.9%**	**27,732,096**	**18.1%**
In Labor Force	**5,766,682**	**33.1%**	**125,483,904**	**81.9%**
Employed	4,982,692	28.6%	118,895,616	77.6%
Unemployed	783,990	4.5%	6,588,288	4.3%
Total	**17,422,000**	**100.0%**	**153,216,000**	**100.0%**
Unemployment Rate		**13.6%**		**5.3%**

Source: U.S. Bureau of the Census Website, Table 297.
http://www.census.gov/hhes/www/disable/cps
Survey: CPS, 1997.

Does labor force participation of people with a work disability differ by gender?

In general, more men than women participate in the labor force, and this is true for people with and without work disabilities. For both men and women, **labor force participation** is much lower among those with a work disability. In 1997, among working-age men (16 to 64 years), only 3 million or 36.1% of men with a work disability were in the work force, compared to 67 million or 88.7% of men with no work disability. Similarly, only 2.7 million or 30.3% of women with a work disability participated in the labor force, compared to 58.6 million or 75.4% of women with no work disability.

For both men and women, work disability dramatically lowers labor force participation rates.



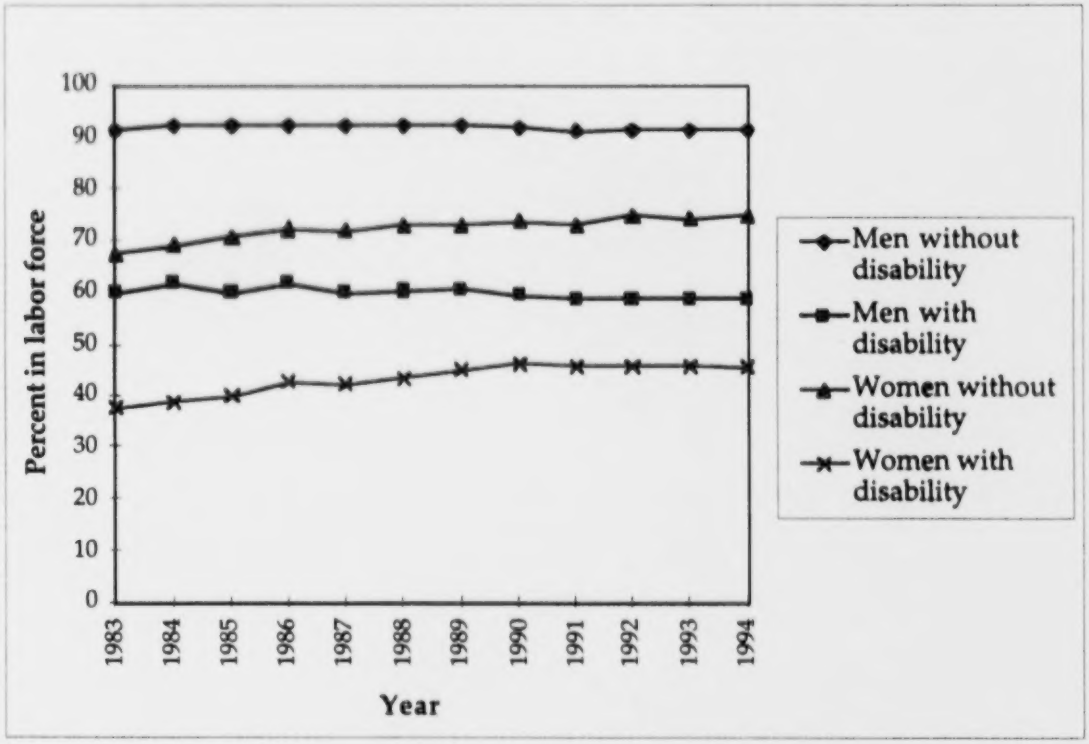
Source: U.S. Bureau of the Census Website: Table 297
http://www.census.gov/hhes/www/disable/cps
Survey: CPS, 1997.

How do labor force participation rates compare over time, for men and women with and without activity limitations?

In the United States in 1994, 158.6 million people were of working age (18 to 64 years old) according to the **National Health Interview Survey (NHIS)**. Of these, 124.6 million were in the labor force, a **labor force participation rate** of 78.6%. However, labor force participation rates are quite different for those with **activity limitations**. Labor force participation was 83% for persons with no activity limitations; but only 51.8% for those with activity limitations as defined by NHIS. This difference is consistent for men and for women: 58.8% participation rate for men with limitations versus 91.4% for men with no limitations; 45.6% participation rate for women with limitations compared to 74.9% of women with no limitations.

Between 1983 and 1994 there has been little change in these labor force participation rates.

Labor force participation rates have been consistently lower for men and women with activity limitations, compared to those without activity limitations.



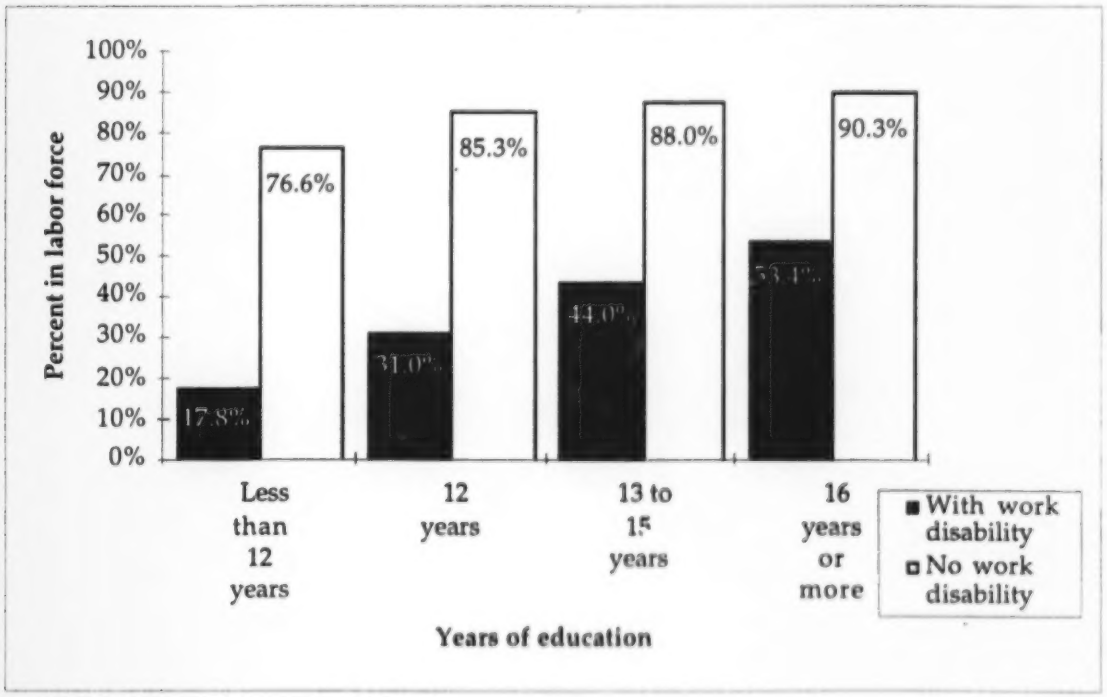
Source: Trupin, et al. (1997), Disability Statistics Report #10: Table 2.
Survey: NHIS, 1983 - 1994.

Does labor force participation of people with a work disability differ by education?

As level of education rises, so does labor force participation, and this is true for people with and without **work disabilities**. However, **labor force participation** increases much more sharply for people with work disabilities than for those without. Among the work-disabled population, 25 to 64 years of age, only 17.8% of those with less than 12 years of education were in the labor force. Labor force participation rises to 31% for those who completed 12 years of school, increases again to 44% for those with 13 to 15 years of education, and reaches 53.4% for people with 16 or more years of education.

In comparison, among people in the same 25 to 64-year-old age group who do not have a work disability, 76.6% of those with less than 12 years of education were in the labor force. For those with 12 years of school, the rate was 85.3%; for those with 13 to 15 years of school, 88%; and for those with 16 years or more, 90.3%.

Labor force participation increases with education level more sharply for those with a work disability than for those without.



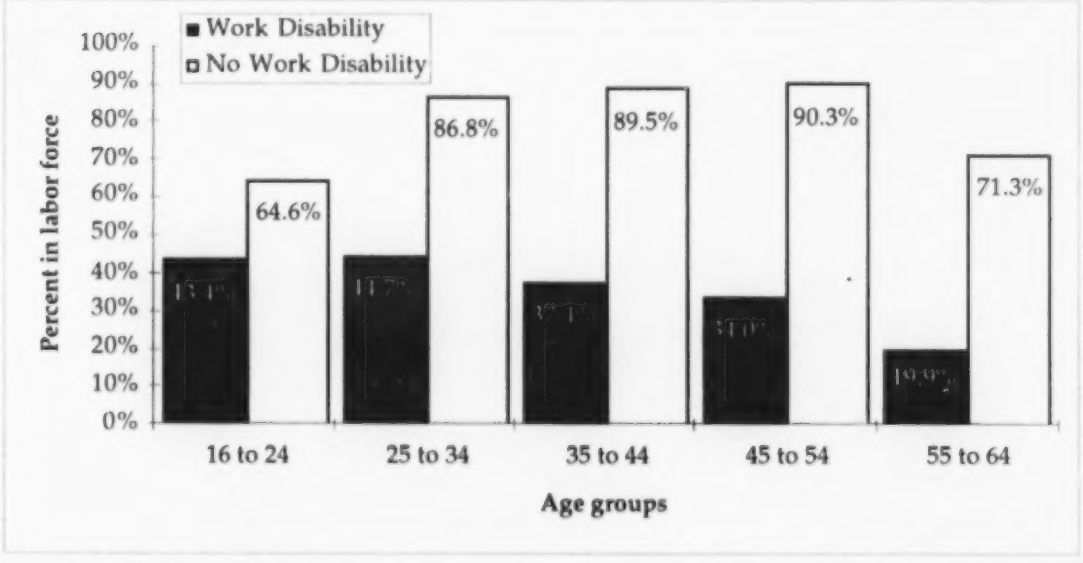
Source: U.S. Bureau of the Census, Table 297.
http://www.census.gov/hhes/www/disable/cps
Survey: CPS, 1997.

Does labor force participation of people with a work disability differ by age?

Percentages of people with a **work disability** in the **labor force** generally decrease with age. Among people in the 16 to 24-year-old group with a work disability, 43.4% are in the labor force (600,000 people). The rate remains about the same for those aged 25 to 34 years, at 44.7% (1.2 million). As people with work disabilities grow older, their rate of labor force participation turns downward. In the group 35 to 44 years of age, 37.4% (1.5 million) are in the labor force. At 45 to 54 years of age, 34% (1.5 million) are participating in the labor force; and for those 55 to 64 years, the labor force participation rate drops precipitously to 19.9% (992,000).

People with no work disability have much higher labor force participation rates, and much less decrease in labor force participation with age. In the 16 to 24-year-old group, 64.6% are in the labor force (20.2 million). The rate climbs to 86.8% for people who are 25 to 34 years old (32.3 million); reaches 89.5% for people 35 to 44 years old (35.5 million); and peaks at 90.3% for people 45 to 54 years old (25.8 million). Finally, the rate declines to 71.3% for those in the 55 to 64-year-old age group (11.8 million).

As age increases, fewer people with work disabilities participate in the labor force, relative to their non-work disabled counterparts.



Source: U.S. Bureau of the Census, Table 297
http://www.census.gov/hhes/www/disable/cps
Survey: CPS, 1997.

What occupations are held by people with a work disability who are employed?

Of the 120 million people employed in the United States, 16 million are people with disabilities, according to analysis of **SIPP** employment data. The table Occupations of Workers with Disabilities, 1991-1992 shows the numbers of people with disabilities employed in various occupational categories. In this table, occupations are organized from the occupation where the highest number of people with disabilities are employed (executive and administrative) and ends with the occupation with the fewest reported people with disabilities (pharmacists, lawyers, judges, physicians, dentists, health professionals, firefighting and fire prevention.)

The second column in the table shows the cumulative percentage of all employed people with disabilities, as the reader moves down the list. The list is divided into Quartiles, showing roughly one quarter of all employed people with disabilities in each quartile. Thus, executive and administrative, machine operators, food preparation and service and sales workers account for approximately 25% of all employed people with disabilities. Handlers, cleaning and building services, mechanics and repairers, motor vehicle operators, secretarial, construction trades, and miscellaneous administrative support account for the second quartile. Many of the professions or occupations requiring advanced degrees (engineers , architects, registered nurses, social scientists, urban planners, lawyers) are in the fourth quartile.

Occupations of Workers with Disabilities

Total People Employed in the U.S. = 119,997,000 = 100%
Total People with Disabilities Employed in the U.S. = 16,064,000

Occupations	Workers with a Disability	Cumulative % of Those Employed
First Quartile		
Executive and administrative	995,000	6.9%
Machine operators	855,000	12.9%
Food preparation and service	813,000	18.6%
Sales workers (retail and personal services)	803,000	24.2%
Second Quartile		
Handlers, equip. cleaners, helpers, laborers	768,000	29.5%
Cleaning, building service (except household)	669,000	34.2%
Mechanics, repairers	603,000	38.4%
Motor vehicle operators	507,000	42.0%
Secretaries, stenos, typists	493,000	45.4%
Construction trades	484,000	48.8%
Misc. administrative support	435,000	51.8%
Third Quartile		
Health service	414,000	54.7%
Teachers	411,000	57.6%
Farm, forestry, fishing, and related	380,000	60.2%

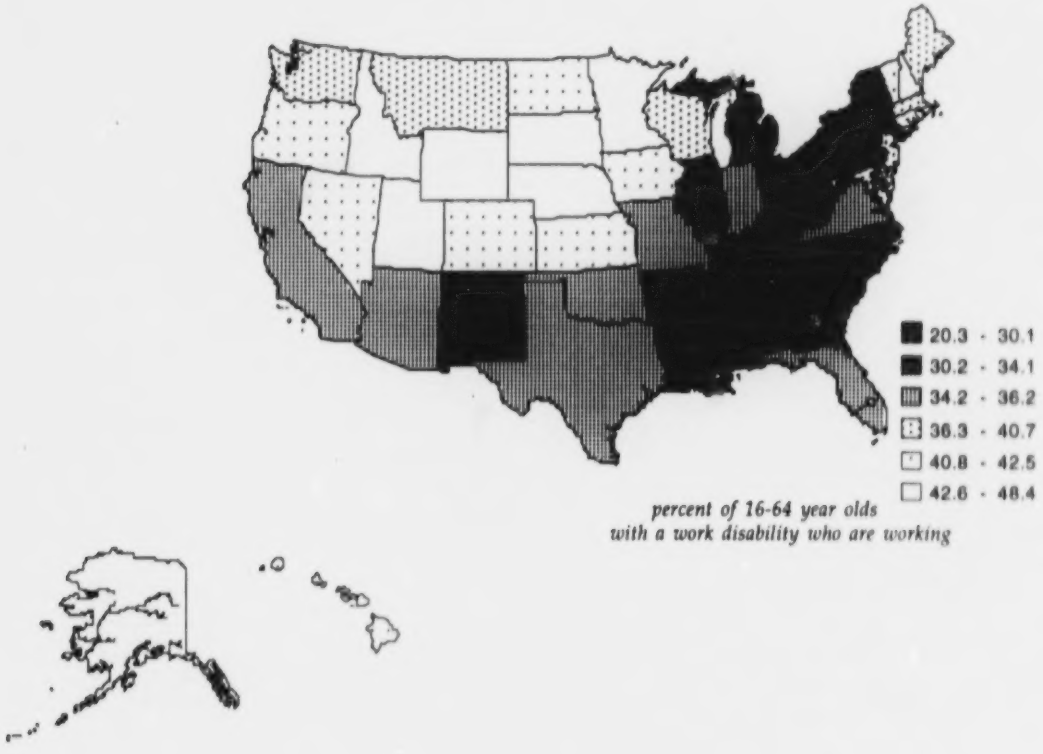
Sales supervisors and proprietors	354,000	62.7%
Precision working	319,000	64.9%
Fabricators, assemblers, hand working	313,000	67.1%
Management related	306,000	69.2%
Personal service	304,000	71.4%
Material recording, sched., distributing clerks	287,000	73.4%
Financial records processing	271,000	75.3%
Fourth Quartile		
Engineers, architects, surveyors	195,000	76.6%
Material moving equipment operators	187,000	77.9%
Health technologists and technicians	181,000	79.2%
Guards	180,000	80.4%
Information clerks	179,000	81.7%
Social, recreation, religious workers	178,000	82.9%
Supervisors (production operations)	177,000	84.2%
Registered nurses	166,000	85.3%
Production inspectors, testers, and related	152,000	86.4%
Writers, artists, entertainers, athletes	150,000	87.4%
Engineering technologists and technicians	149,000	88.5%
Sales representatives (commodities except retail)	149,000	89.5%
Supervisors (administrative support)	147,000	90.5%
Sales representatives (finance and bus. services)	132,000	91.5%
Math and computer scientists	126,000	92.3%
Postsecondary teachers	104,000	93.1%
Private household	97,000	93.7%
Records processing (except financial)	96,000	94.4%
Computer equipment operators	95,000	95.1%
Mail and message distributing	91,000	95.7%
Police, detectives	82,000	96.3%
Other technicians (except health, engin., science)	61,000	96.7%
Office and communications equip. operators	52,000	97.1%
Rail and water transportation	41,000	97.4%
Other health assessment and treating	39,000	97.6%
Plant and system operations	38,000	97.9%
Science technicians	37,000	98.2%
Social scientists, urban planners	37,000	98.4%
Extractive	33,000	98.6%
Natural scientists	31,000	98.9%
Computer programmers	30,000	99.1%
Librarians, archivists, curators	29,000	99.3%
Counselors (educational and vocational)	28,000	99.5%
Pharmacists	22,000	99.6%
Lawyers, judges	21,000	99.8%
Physicians, dentists, health diagnosing	20,000	99.9%
Firefighting, fire prevention	14,000	100.0%

Source: McNeil (1993), Americans with Disabilities: 1991-92; West Virginia University Website: http://web.icdi.wvu.edu/disability/ustabl7.html
Survey: SIPP, 1991-92.

Do the states differ in the percentage of people with a work disability who are working ?

The ten states with the highest percentage of people with **work disabilities** who are working are Minnesota - 48.4%, South Dakota - 46.3%; Nebraska - 45.4%, Alaska - 45.3%, Utah - 43.9 %, Connecticut and New Hampshire - 43.5%, Wyoming - 42.7%, Idaho - 42.6% and Iowa - 42.5%. With the exception of New York and New Mexico, the ten states with the highest percentage of people not working are in the south: West Virginia, Mississippi, Louisiana, Kentucky, Alabama, Tennessee, Arkansas and South Carolina.

Employment rate of people with a work disability, by state.



Employment Rate of People with a Work Disability, by State

State	Percent Working	Percent Not Working	State	Percent Working	Percent Not Working
Alabama	26.1	73.9	Missouri	34.2	65.8
Alaska	45.3	54.7	Montana	37.5	62.5
Arizona	35.0	65.0	Nebraska	45.4	54.6
Arkansas	28.2	71.8	Nevada	41.9	58.1
California	34.8	65.2	New Hampshire	43.5	56.5
Colorado	42.1	57.9	New Jersey	36.9	63.1
Connecticut	43.5	56.5	New Mexico	31.4	68.6
Delaware	40.4	59.6	New York	30.2	69.8
D.C.	31.5	68.5	North Carolina	33.6	66.4
Florida	34.8	65.2	North Dakota	41.7	58.3
Georgia	32.2	67.8	Ohio	32.6	67.4
Hawaii	40.8	59.2	Oklahoma	34.7	65.3
Idaho	42.6	57.4	Oregon	42.4	57.6
Illinois	33.6	66.4	Pennsylvania	31.6	68.4
Indiana	36.2	63.8	Rhode Island	37.4	62.6
Iowa	42.5	57.5	South Carolina	29.7	70.3
Kansas	41.5	58.5	South Dakota	46.3	53.7
Kentucky	24.4	75.6	Tennessee	27.8	72.2
Louisiana	23.7	76.3	Texas	34.2	65.8
Maine	37.5	62.5	Utah	43.9	56.1
Maryland	40.0	60.0	Vermont	41.8	58.2
Massachusetts	36.3	63.7	Virginia	35.4	64.6
Michigan	31.9	68.1	Washington	40.5	59.5
Minnesota	48.4	51.6	West Virginia	20.3	79.7
Mississippi	23.5	76.5	Wisconsin	40.2	59.8
			Wyoming	42.7	57.3

Source: West Virginia University Website.
http://www.icdi.wvu.edu/disability/tables
Survey: U.S. Bureau of the Census, 1990 Census.

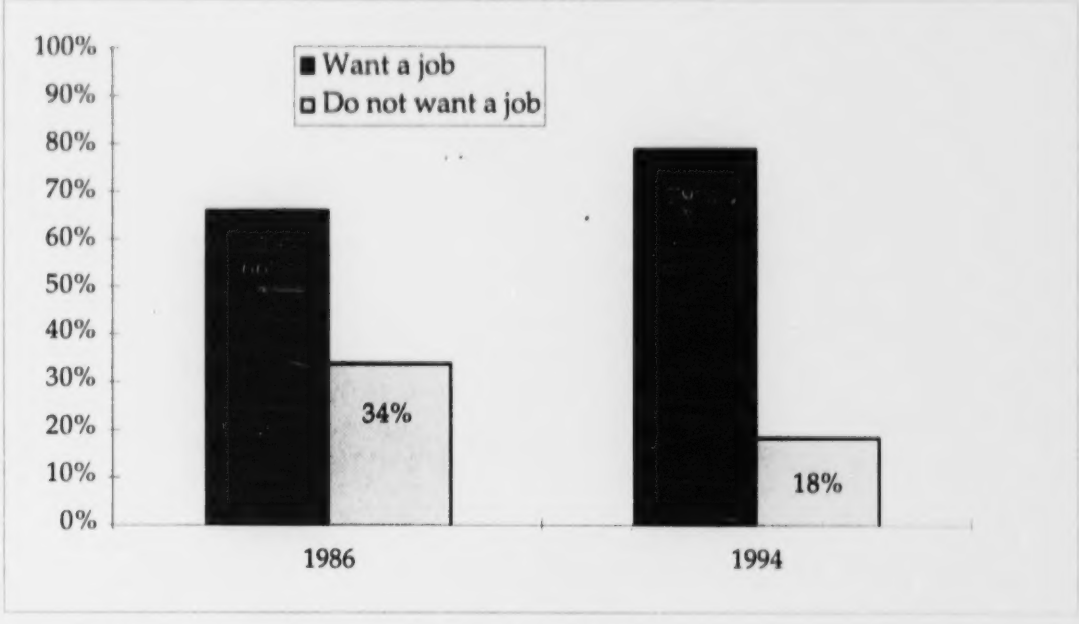
How many working-age people with disabilities say they would like to work?

In 1986 and 1994, the National Organization on Disability (NOD) commissioned Louis Harris and Associates to conduct polls on the attitudes and experiences of Americans with disabilities. In those polls, an overwhelming majority of working-age people with disabilities who were not working indicated that they wanted to work.

The number of working-age people between 16 and 64 years of age with disabilities who indicated in the Harris Survey that they want to work increased from 66% to 79% between 1986 and 1994. In the age group between 16 and 44 years, 84% say they want to work.

Among those who report they are unable to work due to their disability, two-thirds say they would like to have a job.

More than three-quarters of working-age people with disabilities who are not currently working would like to work.



Source: National Organization on Disability (1994a, 1994b).
Survey: Louis Harris & Associates, 1986, 1994, commissioned by National Organization on Disability.

Section 3. Factors Related to Work Disability

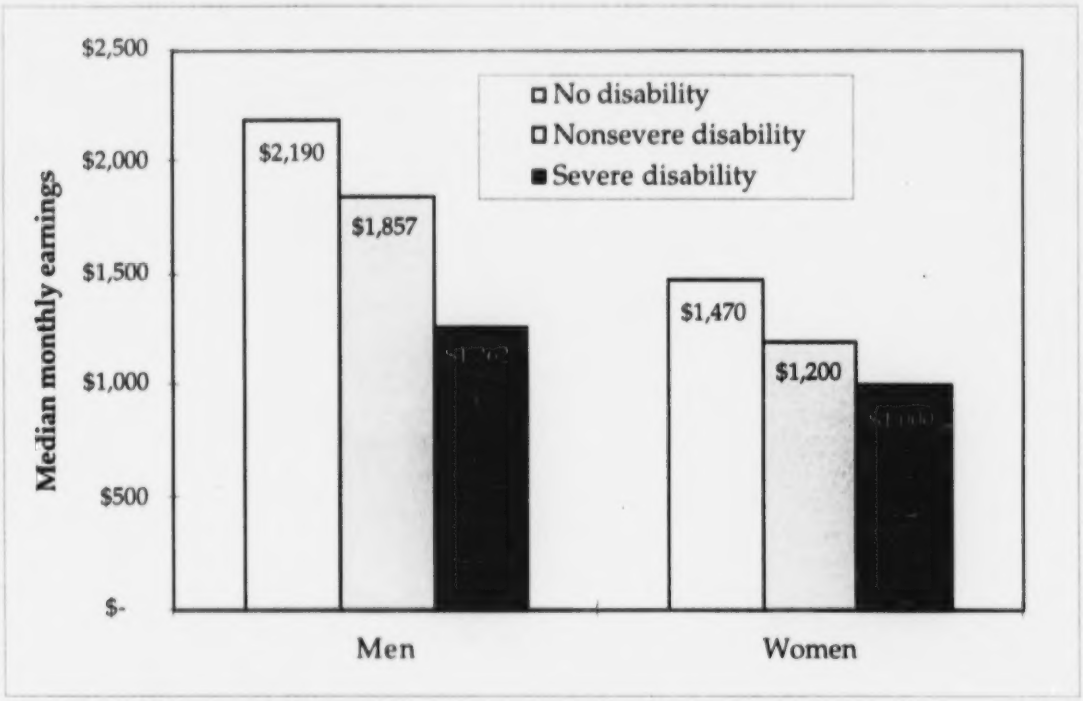
Work disability, the condition of being unable to work, or being limited in the amount or kind of work, can be caused by a variety of circumstances both on and off the job. What chronic health conditions are the most frequent causes of work limitation? How do occupational injuries and illnesses affect work disability?

Many different factors contribute to the high numbers of people with disabilities who are not working or not in the labor force. One factor is the functional limitation itself, another is the attitude others might have about the employability of individuals with such limitations. Some factors are demographic (age, gender, race, education, loss of benefits); some are related to income or opportunity. This section also addresses the relationship of such factors to work disability.

What are the median earnings of working people by disability status?

Working people with **disabilities** have much lower median monthly earnings than workers with no work disability. In 1994-1995 the median monthly earnings of men with no disabilities was $2,190; men with nonsevere disabilities earned $1,857; and men with severe disabilities earned $1,262. The median monthly earnings for women with and without disabilities consistently was significantly lower than that of men. Women with no disabilities earned $1,470; with non-severe disabilities, $1,200 and with severe disabilities, $1,000.

For both men and women, median monthly earnings are lower for people with a disability, and even lower for those with a severe disability.

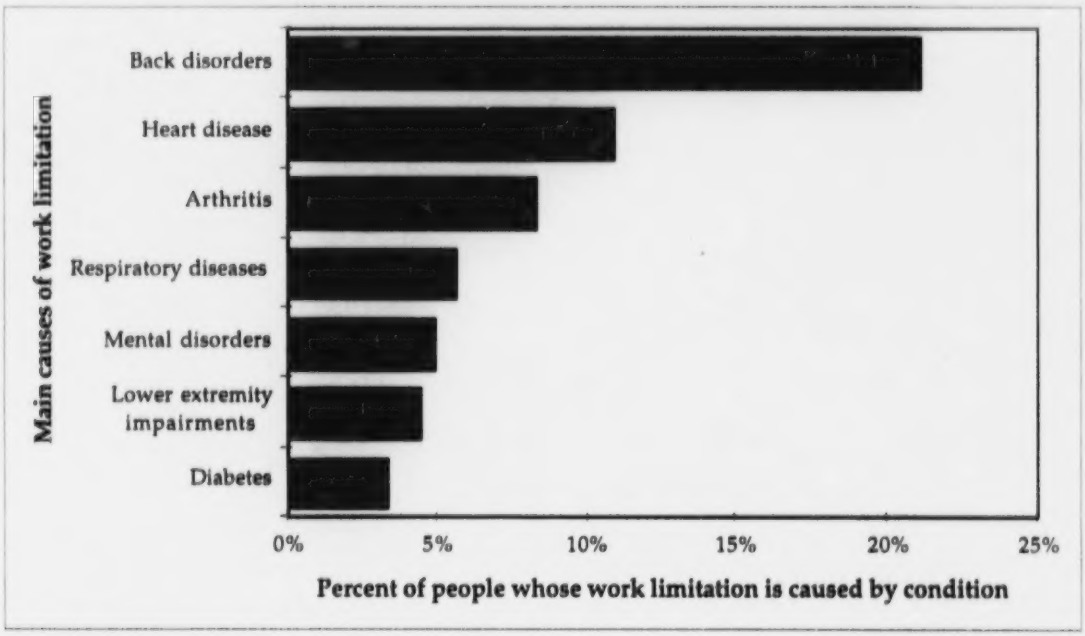


Source: McNeil (1997), Americans with Disabilities: 1994-95; U.S. Bureau of the Census Website: http://www.census.gov/hhes/www/disable/sipp
Survey: SIPP, 1994-95.

What chronic health conditions most frequently cause work limitation?

The **National Health Interview Survey (NHIS)** is the best source of information about which **chronic health conditions** most frequently cause **work limitation.** When respondents to the NHIS are asked about work limitation, they also are asked to specify "the main cause of this impairment." Back disorders (including orthopedic impairments and disc disorders) are the most frequent main causes of work limitation. It is estimated that almost 4 million people experience work limitations that primarily are caused by back disorders, representing 21.1% of all main conditions. Back disorders are followed by heart disease (2.1 million people or 10.9% of main conditions), osteoarthritis and related disorders (1.6 million people or 8.3% of main conditions), and diseases of the respiratory system (1.1 million or 5.6%). Other top causes of work limitation include mental disorders (925,000 or 4.9%), orthopedic impairments of lower extremities (861,000 or 4.5%) and diabetes (624,000 or 3.3%).

The top seven chronic conditions causing work limitation.



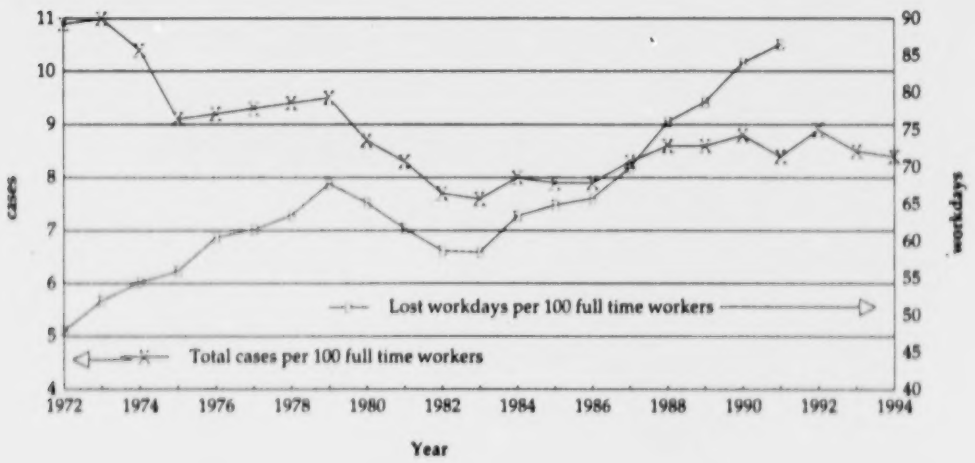
Source: LaPlante & Carlson (1996), Table 7a.
Survey: NHIS, 1992.

What is the trend in occupational illness and injury?

Occupational injuries and illnesses also contribute to **work disability.** Over the past twenty years, the number of reported occupational injuries and illnesses generally has decreased, but the impact of these injuries and illnesses has increased greatly. In 1972, for every 100 full-time workers there were 10.9 occupational injuries or illnesses reported. By 1994, the incidence rate had dropped to 8.4 per 100 workers.

Interestingly, while the incidence rate of reported occupational injuries and illnesses dropped, from 1972 to 1991 the lost workdays per 100 workers increased from 47.9 to 86.5.

The effect of occupational illnesses and injuries has increased from 1972 to 1991.



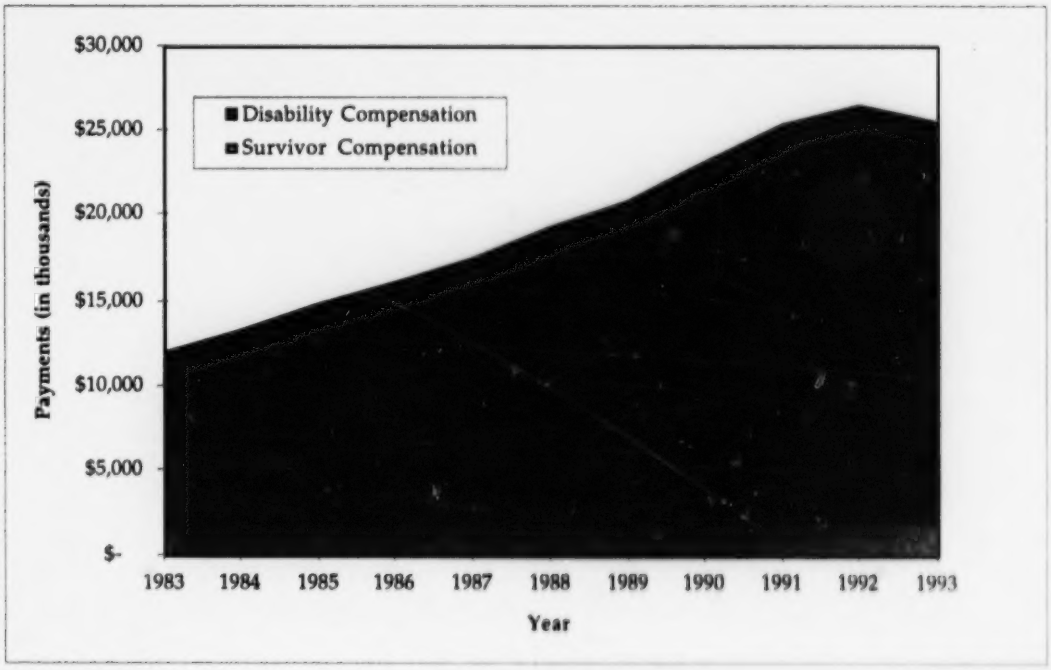
Source: Bureau of Labor Statistics, Office of Safety and Health Statistics.
Survey: ASOII, 1972-1994.

How many people receive Workers' Compensation?

An estimated 96.1 million employees were insured by **Workers' Compensation** in 1993. From 1983 to 1993, disability compensation payments grew from $10.4 million to $23.4 million while compensation payments to survivors rose only slightly from $1.5 million to $1.9 million over the same period.

Employers' self-insurance payments and medical and hospitalization costs tripled in the ten years between 1983 and 1993. Employers' self-insurance payments rose from $3.2 million to $9.9 million while medical and hospitalization costs rose from $5.7 million to $17.5 million.

Workers' Compensation disability payments more than doubled between 1983 and 1993.

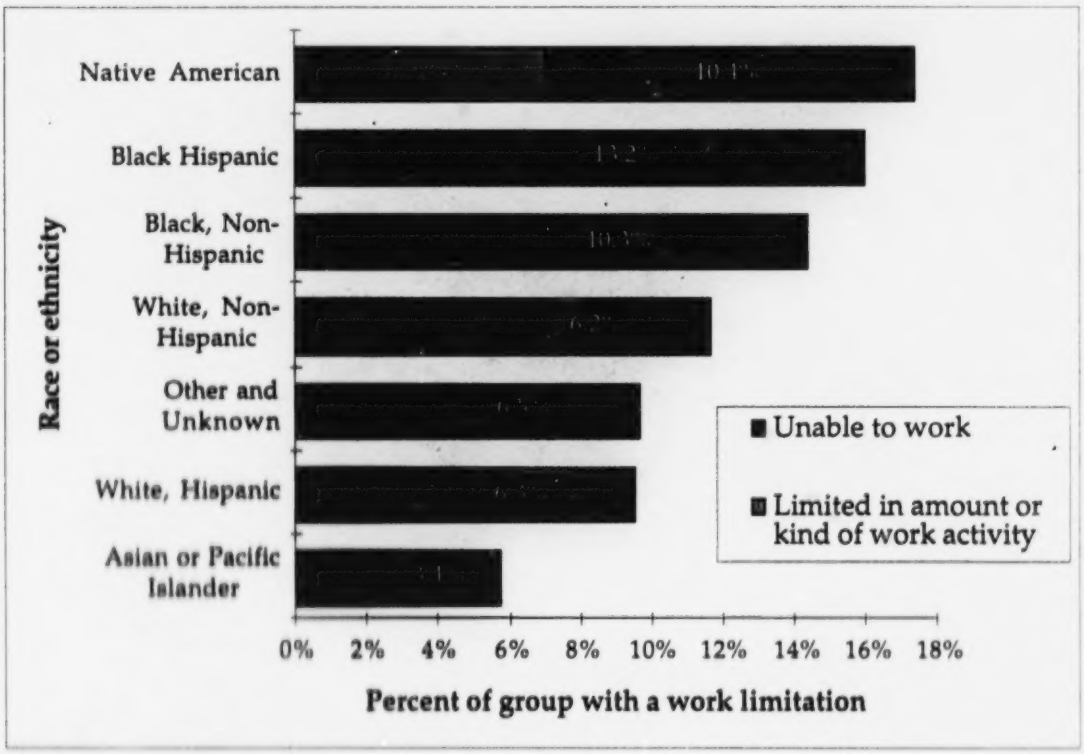


Source: Social Security Administration (1996), Table 9, B1, p. 351.
Survey: Social Security Administration Program Data, multiple years.

How is work limitation associated with race and ethnicity?

The NHIS collects information on race and ethnicity. In the working-age population 18 to 69, Native Americans report the highest percentage of limitation in work due to chronic conditions - 17.3% or 262,000 people. Blacks (non-Hispanics) also have a high rate of limitation - 14.4% or 2.7 million people. Asian Americans reported the lowest levels of limitation - 5.7% or 311,000 persons. While white non-Hispanics reported work limitations of 11.6% or 14,261,000 people, white Hispanics reported 9.6% or 996,000 people and black Hispanics reported 15.7% or 60,000. These varying rates may be related to cultural and geographical as well as demographic distinctions.

Native Americans report the highest rates of work limitation.



Source: LaPlante & Carlson (1996), Table 2.
Survey: NHIS, 1992.

How does work disability differ by gender?

There is little difference in the percentage of working-age men and women with a **work disability**. The 8.4 million men with a work disability make up 10.1% of the male population age 16 - 64. The 9 million women with a work disability comprise 10.4% of the working-age female population.

The rate of **severe work disability** is nearly the same for men and women - 6.5% or 5.5 million men and 6.7% or 5.8 million women.

Do not compare these data to earlier data as the question asked in the **CPS** was rephrased in 1994. This has resulted in more people with a work disability being identified, and particularly increases the numbers in the 35-44 and 45-54 year age groups.

Men and women have similar rates of work disability at all ages.

Age Groups	Males		Females		Total	
16-24	4.2%	683,000	4.3%	698,000	4.2%	1,382,000
25-34	6.3%	1,232,000	6.9%	1,385,000	6.6%	2,617,000
35-44	9.4%	2,030,000	9.2%	2,041,000	9.3%	4,072,000
45-54	13.2%	2,128,000	13.3%	2,241,000	13.3%	4,368,000
55-64	23.1%	2,370,000	23.3%	2,614,000	23.2%	4,983,000
Total	**10.1%**	**8,443,000**	**10.4%**	**8,980,000**	**10.2%**	**17,422,000**

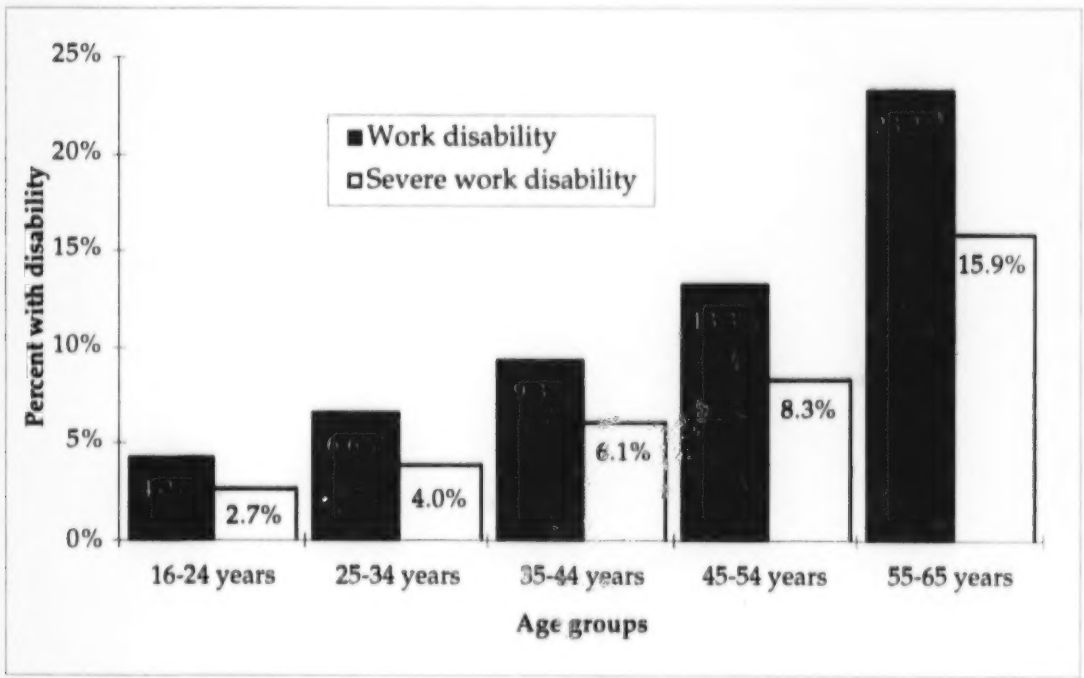
Source: U.S. Bureau of the Census Website, Table 197.
http://www.census.gov/hhes/www/disable/cps/cps
Survey: CPS, 1997.

How does work disability differ by age?

Work disability increases with age. Among people 16 to 24 years old, only 4.2% are work disabled, while in the 25 to 34-year-old group, 6.6% have a work disability. For those between 35 and 44 years of age, work disability increases to 9.3%. Between 45 and 54 years of age, the work disability rate increases to 13.3%, and reaches 23.2% for the 55 to 64-year-old group.

The relationship between age and **severe work disability** is even more pronounced. Only 2.7% of people between 16 and 24 years old have a severe work disability, compared to 4.0% of those 25 to 34 years and 6.1% of those 35 to 44 years. The rate of severe work disability rises to 8.3% for those 45 to 54, and climbs sharply to 15.9% for people in the 55 to 64 year old group.

Work disability and severe work disability increase with age.



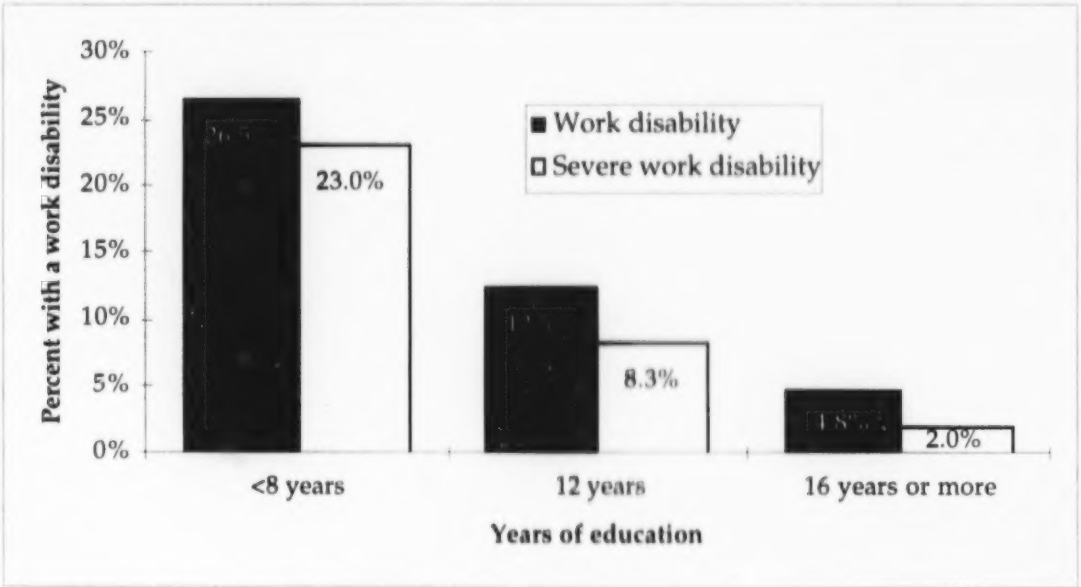
Source: U.S. Bureau of the Census Website, Table 197.
http://www.census.gov/hhes/www/disable/cps
Survey: CPS, 1997.

How does work disability differ by educational level?

There is a strong inverse relationship between level of education and **work disability** among people 25-64 years old. As the level of educational attainment rises, the percentage of people with work disability goes down. According to 1997 CPS data, people with less than 8 years of schooling had a work disability rate of 26.5%; people with a high school degree (12 years of schooling) had a work disability rate of 12.5%; and people with a college degree (16 or more years of schooling) had a work disability rate of 4.8%.

The inverse relationship is even stronger between education and **severe work disability.** People with less than 8 years of schooling had a severe work disability rate of 23%; people with a high school degree (12 years of schooling) had a severe work disability rate of 8.3%; while people with a college degree (16 or more years of schooling) had a severe work disability rate of only 2%.

As educational attainment goes up, work disability goes down.



Source: U.S. Bureau of the Census Website, Table 197.
http://www.census.gov/hhes/www/disable/cps
Survey: CPS, 1997.

Section 4. Work-related Resources

There are many federal, state and local agencies which provide various types of assistance for people with work disabilities.

In this section, benefits from federal programs assisting people with a work disability are described, including how many people with a work disability receive benefits from the Social Security Administration through SSDI or SSI. This section also presents information about several other programs, including the Vocational Rehabilitation program, and other work-related resources for people with disabilities.

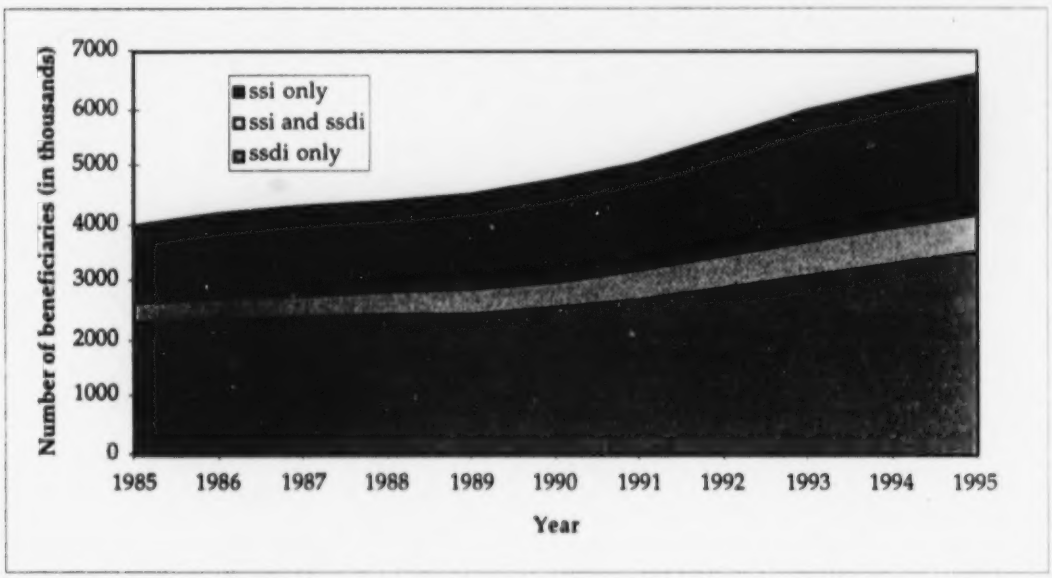
How many people with a work disability receive benefits from the Social Security Administration?

The Social Security Administration has two insurance programs which provide benefits to working-age individuals with disabilities: **Social Security Disability Insurance (SSDI)** and **Supplemental Security Income (SSI).**

In recent years, participation by working-age people in Social Security disability programs has grown from less than 4 million people in 1985 to 6.6 million people in 1995.

The inflation-adjusted cost of cash benefits rose 66% from $23 billion in 1985 to $53 billion in 1994. In addition, the cost of providing Medicare and Medicaid to these beneficiaries was about $48 billion. Thus the General Accounting Office reports that the cost of cash benefits and health care benefits for disabled beneficiaries in 1994 was $101 billion.

Participation in Social Security disability programs has grown from the mid-80s to the mid-90s.



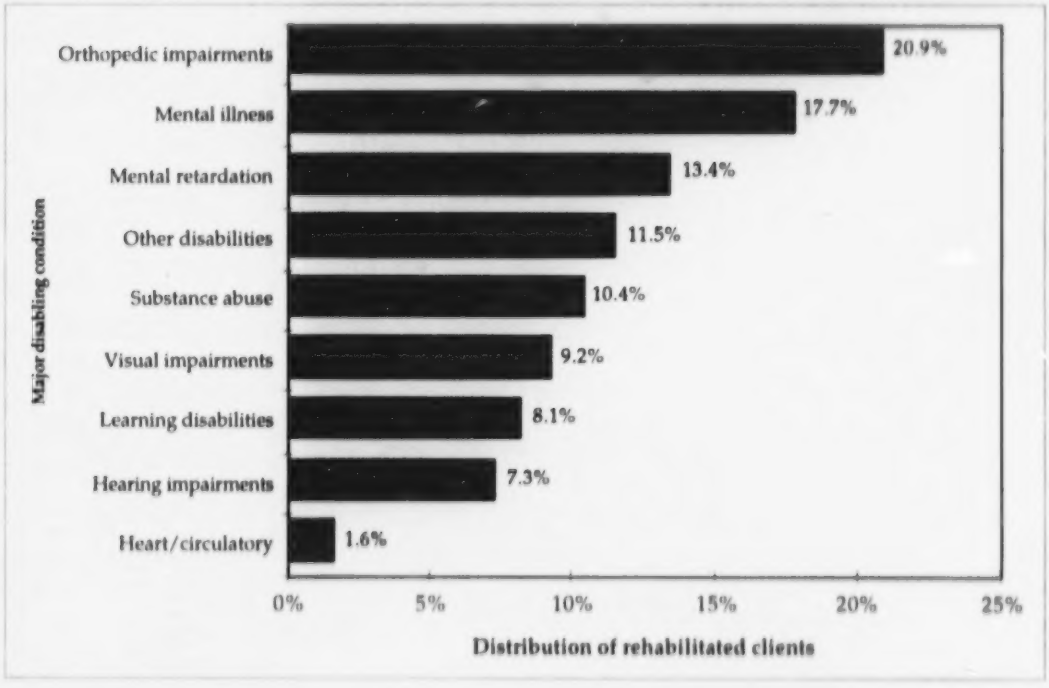
Source: General Accounting Office (1996). Social Security Administration (1996).
Survey: Social Security Administration Program Data, multiple years.

What are the conditions of people who are helped by Vocational Rehabilitation?

The state-federal **Vocational Rehabilitation** (VR) program, authorized by the Rehabilitation Act of 1973, as amended, provides services for individuals with disabilities to assist in obtaining employment.

The VR program served 1,250,314 people in fiscal year 1995 including 940,177 with severe disabilities. In that year, 209,599 individuals, including 158,559 with severe disabilities, were **rehabilitated** or successfully completed their VR services and found work in a variety of jobs. The chart below illustrates the varying types of conditions and impairments of people rehabilitated by VR programs.

People who successfully complete VR have a range of disabilities.

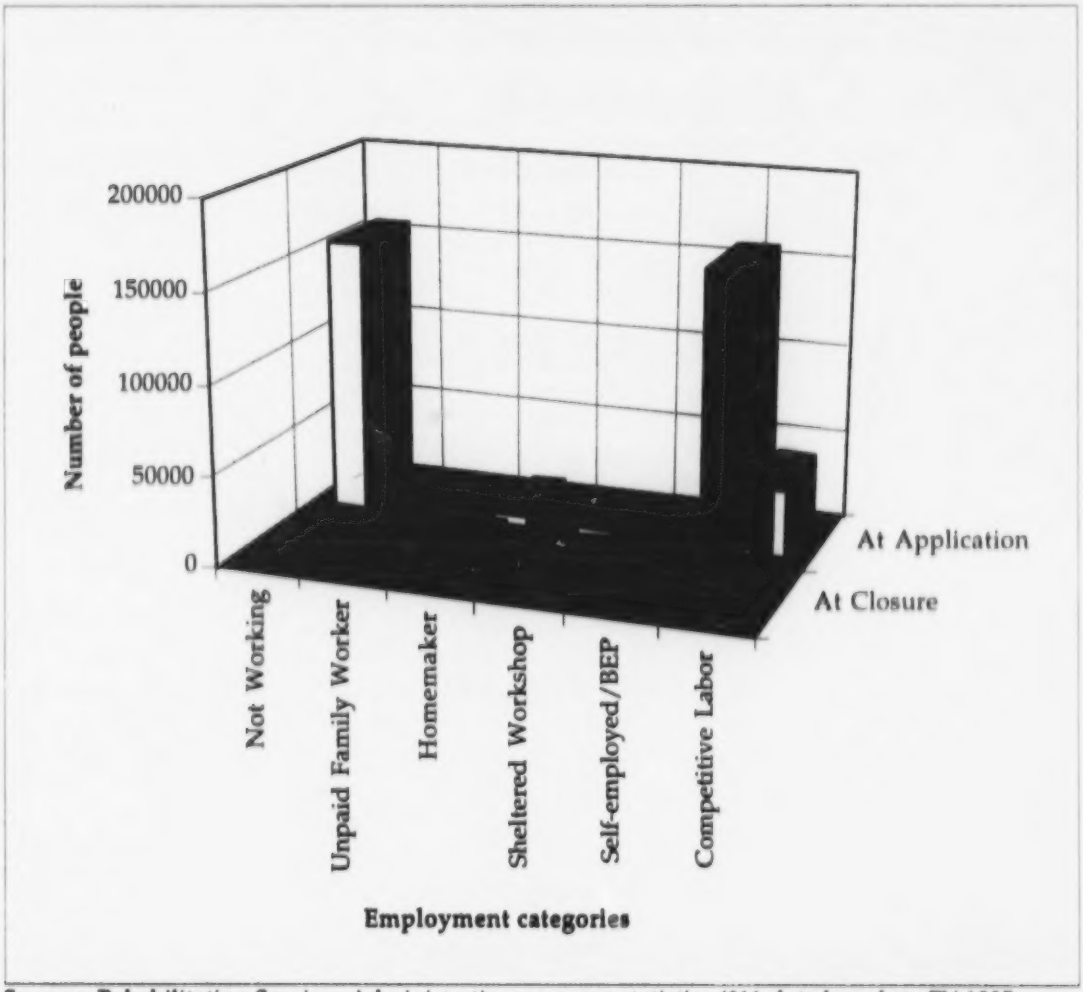


Source: Rehabilitation Services Administration program statistics (911 data based on FY 1995 cumulative case load report).

Where in the labor market does the Vocational Rehabilitation system place successful clients?

The vast majority of clients who are **rehabilitated** successfully through the **Vocational Rehabilitation (VR)** system are placed in competitive employment. In 1995, 178,927 or 85.4% were placed in competitive work. The remainder were placed as homemakers (7.6 %), in sheltered workshops (4.0%), self-employed (2.7%) and unpaid family workers (0.39 %).

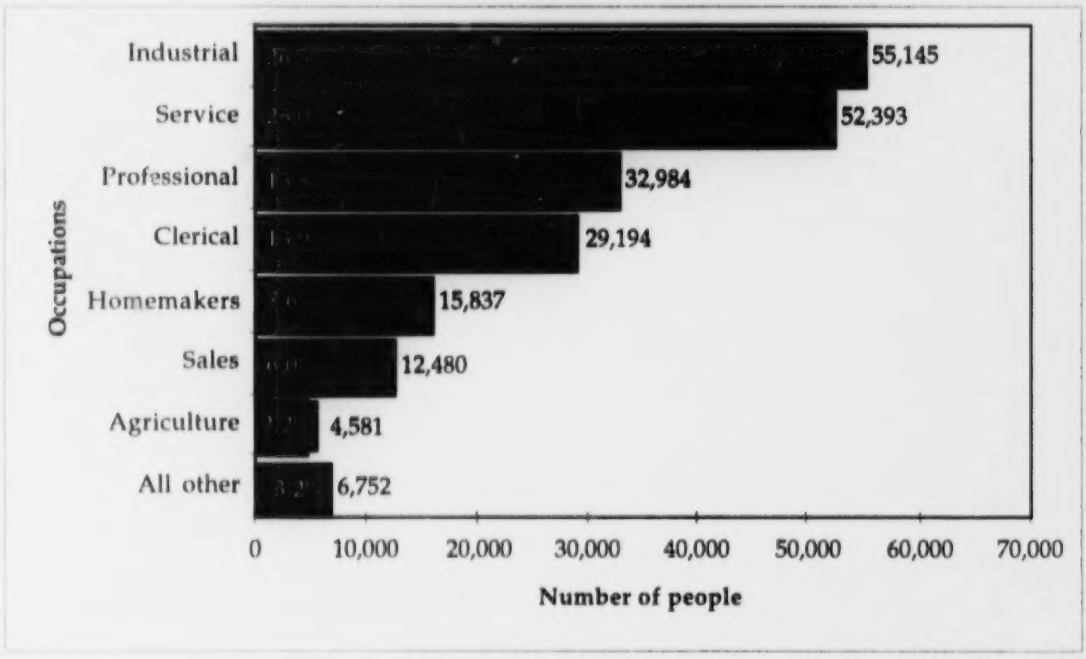
More than 3 out of every 4 successful Vocational Rehabilitation clients find a job in the competitive labor market.



Source: Rehabilitation Services Administration program statistics (911 data based on FY 1995 cumulative case load report).

Of those who were **rehabilitated** in 1995, the most common occupation placements at case closure were industrial (26.3%); service (25%); professional (15.8%); and clerical (13.9%).

The Vocational Rehabilitation system places people into a wide range of occupations.



Source: Rehabilitation Services Administration program statistics (911 data based on FY 1995 cumulative case load report).

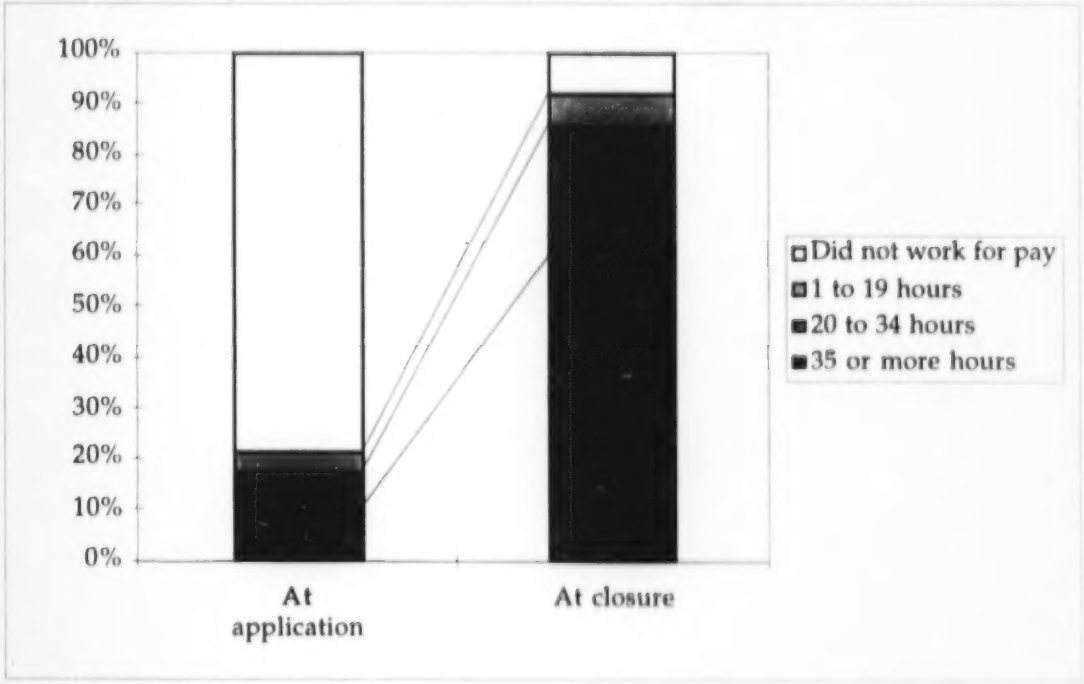
Do people who are successfully rehabilitated by the Vocational Rehabilitation system work full-time?

In 1995, sixty percent of all clients who successfully completed their rehabilitation program with the Vocational Rehabilitation system worked 35 or more hours per week. Another 25.7% of successful clients worked from 20 to 34 hours per week.

All clients who were **rehabilitated** successfully by the Vocational Rehabilitation system in 1995 worked an average of 31.4 hours per week. However, this average includes a portion of people who did not work for pay. The average hours per week increases to 34.1 hours when only clients who worked for pay are included.

By comparison, when clients applied and were accepted for vocational rehabilitation services, 78.5% were not working for pay. For those clients who did any kind of work for pay at all at application, the average time worked was 29.9 hours per week.

About 60% of successful rehabilitation clients worked a full work week.

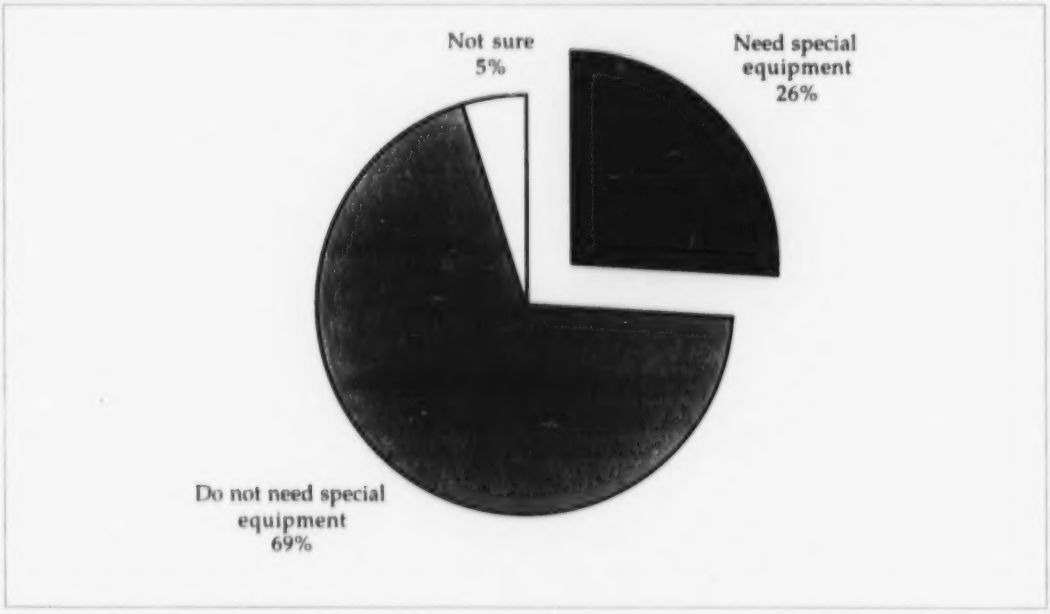


Source: Rehabilitation Services Administration program statistics (911 data based on FY 1995 cumulative case load report).

What special equipment or technology do people with disabilities need for the jobs they prefer?

Most adults with disabilities who are working or willing and able to work do not need special equipment or technology to perform their jobs effectively. For the 26% who report needing special equipment or technology to do their jobs effectively, the technology is readily available and relatively inexpensive. Needs vary among employed and non-working adults with disabilities. Those working full-time or part-time (18%) and those who are not working currently (11%) are more likely to need a personal or laptop computer. Among those not working, 10% need a specialized wheelchair.

Sixty-nine percent (69%) of people with disabilities do not need special equipment or technology to do their jobs effectively.

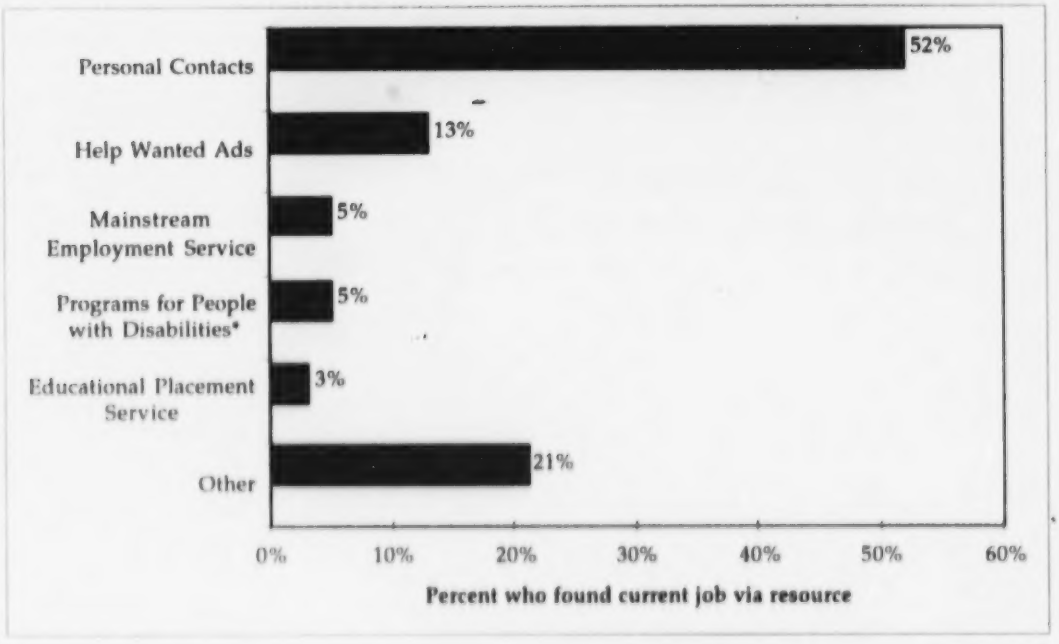


Source: N.O.D. /Harris Survey of Americans with Disabilities (1994).
Survey: Louis Harris and Associates, Inc.

How do employed adults with disabilities find their jobs?

More than half of employed adults with disabilities report that they found their jobs through personal contact. The percentage was highest among those who worked part-time - 62%, compared with those who worked full-time - 45%. One in five or 21% report finding jobs through means other than personal contact, help wanted ads, mainstream employment services, special programs for people with disabilities or college or training program placement programs.

52% of adults with disabilities find their jobs through personal contacts.



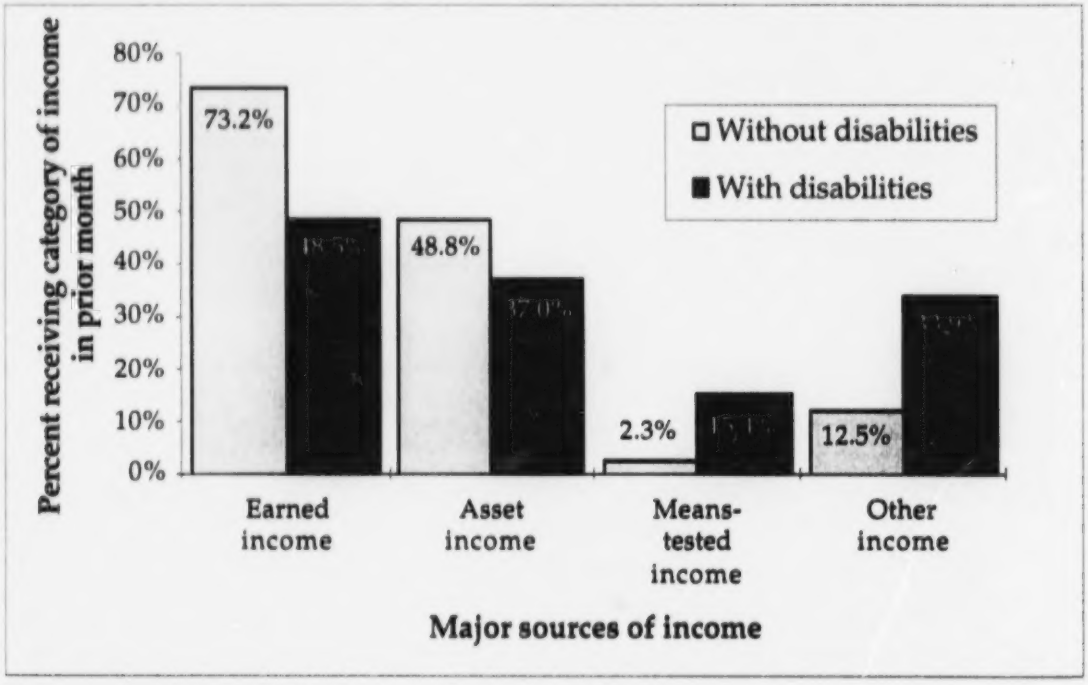
Source: N.O.D. /Harris Survey of Americans with Disabilities (1994).
Survey: Louis Harris and Associates, Inc.

What are the sources of income and benefits for working-age people with disabilities?

People with a **disability**, ages 16-64 years, are more likely to receive **means-tested income** (primarily from SSI) and less likely to receive earned income or asset income (e.g. from investments), compared to people with no disability. Among working-age people with a disability, 16.5% receive Social Security disability or retirement income, and this number rises to 30.3% for people with a severe disability. In the category of means-tested income, 10.6% of people with a disability and 22.3% of people with a severe disability receive SSI.

Given the lower employment rates of people with disabilities, it is not surprising that people with a disability are less likely to receive wage or salary income. Only 42.9% of people with a disability had any income from a first or primary job, compared to 66.4% of people with no disability. In terms of average monthly income from a primary job, people with a disability earned nearly 57% less ($779 per month for people with a disability, compared to $1368 for people with no disability).

People with a disability are less likely to receive earnings and more likely to receive means-tested income.



Source: Kruse (1997), Tables 8 & 9.
Survey: SIPP, 1993-94.

Glossary

This list provides explanation of terms that may require clarification. The definitions are taken from the survey or footnoted publication as closely as possible to convey the original authors' perspectives.

Activities of daily living (ADL): The NHIS probes for information on persons who need the help of others in performing activities of daily living. The ADLs include basic personal assistance needs such as bathing, eating, dressing or getting around inside the home (see also **instrumental activities of daily living**).

The SIPP definition includes the above but also specifies getting into and out of bed or a chair and toileting.

Activity limitation: In the NHIS, each person is classified into one of four categories: (a) unable to perform the major activity, (b) able to perform the major activity but limited in the kind or amount of this activity, (c) not limited in the major activity but limited in the kind or amount of other activities, and (d) not limited in any way. The NHIS classifies people as limited (groups a-c) or not limited (group d). Persons are not classified as limited in activity unless one or more chronic health conditions are reported as the cause of the activity limitation (see also **chronic health condition** and **major activity**).

Chronic health condition: On the NHIS, a condition that a respondent described as having persisted for three or more months is considered to be chronic. Other conditions are always classified as chronic no matter how long the person has had the condition.

Disability: In the NHIS, disability refers to any long- or short-term reduction of a person's activity as a result of an acute or chronic condition.

In the SIPP, persons age 15 and over were considered to have a disability if they met any the following criteria: (a) used a wheelchair; (b) had used a cane or similar aid for 6 months or longer; (c) had difficulty with a functional activity; (d) had difficulty with an **ADL**; (e) had difficulty with an **IADL**; or (f) was identified as having a developmental disability or a mental or emotional disability. A person also was considered to have a disability if (g) the person was 16 years and over and had a condition that made it difficult to do housework; (h) the person was between 16 and 67 years of age and had a condition that limited the amount or kind of work the person could do at a job; (i) the person was under 21 years of age and his or her parents responded on the survey about receipt of developmental services, and limitations in usual activities, the ability to do regular school work or the ability to walk, run, or use stairs; and the person was under age 65 and covered by Medicare or received SSI.

Earnings: The sum of wages and/or salary and net income from farm and nonfarm self-employment.

Full-time employment: A full-time employed worker, according to the CPS, is

one who worked primarily at full-time civilian jobs 50 weeks or more during the preceding calendar year.

Functional limitation: The SIPP asked respondents about their ability to perform the following specific sensory and physical activities: (1) seeing ordinary newspaper print (with glasses or contacts if normally used); (2) hearing normal conversation (using aid if normally used); (3) having speech understood; (4) lifting or carrying 10 lbs.; (5) walking a quarter of a mile without resting; (6) climbing a flight of stairs without resting; (7) getting around outside; (8) getting around inside; or (9) getting into and out of bed. Difficulty in performing any of these functional activities is classified as a functional limitation in the SIPP.

Institutions: The Census counts anyone in an institution on the day of the census as institutionalized. Institutions include correctional institutions, mental (psychiatric) hospitals, residential treatment centers, tuberculosis hospitals, chronic disease hospitals, homes for the aged, homes and schools for the mentally handicapped, homes and schools for the physically handicapped, homes for unwed mothers, homes for dependent and neglected children, training schools for juvenile delinquents, and detention homes for juveniles.

Instrumental activities of daily living (IADL): The NHIS collected information on the respondent's need for assistance in performing instrumental activities of daily living (IADL). The IADLs include routine personal assistance needs such as household chores, doing necessary business, shopping or getting around for other purposes. People who need assistance in ADL were not asked about IADL. (see also **activities of daily living**).

The SIPP includes the above but also specifies need for assistance in keeping track of money or bills, preparing meals, doing light housework and using the telephone.

Labor force: As used by the Bureau of the Census in the March Supplement of the Current Population Survey (CPS), the labor force includes people employed as civilians, unemployed, or in the Armed Forces during the survey week (see also Unemployment rate). People who are neither employed nor seeking employment are not included in the labor force (people engaged in housework, attending school, unable to work because of long-term physical or mental illness, persons who are retired or too old to work, seasonal workers in an off season, and voluntarily idle people).

Labor force participation rate (LFPR): The LFPR is the number of people employed divided by the number of people in the labor force (used by CPS and the SIPP). LFPR, the percentage of the total population currently in the labor force, is a primary measure in labor market analysis. In the NHIS, labor force status is ascertained for the two weeks preceding the HIS interview. A person who had a job, was on temporary layoff, or was looking for work during those weeks is considered to be in the labor force.

Major activity: In NHIS, persons are classified in terms of the major activity usually associated with their particular age group. The major activities for the age groups are (a) ordinary play for children under 5 years of age, (b) attending school

for those 5-17 years of age, (c) working or keeping house for persons 18-69 years of age, and (d) capacity for independent living (e.g., the ability to bathe, shop, eat, dress, and so forth, without needing the help of another person) for those 70 and over. People age 18-69 years who are classified as keeping house are also classified by their ability to work at a job or business (see **activity limitation**).

Mean annual income: The CPS measures the mean annual income by dividing the total income of individuals by the total number of individuals. Income includes wages or salary, interest, dividends, Social Security retirement, Supplemental Security Income, public assistance or welfare, veterans payments, unemployment, worker's compensation, private or public pensions, alimony, child support, regular contributions from persons not living in the household, and other periodic income.

Mean monthly earnings: In the SIPP, the mean monthly earnings are defined as the average monthly earning during the four months prior to the interview. Earnings are defined as wages, salaries, and self-employment.

Means-tested income: In the SIPP, means-tested income refers to assistance that is given to people below a certain level of income. These cash assistance programs include AFDC, SSI and General Assistance. Recipiency status was measured as of the month preceding the interview.

Medical expenditures: The National Medical Expenditure Survey measures costs for medical care by totaling costs for hospital care, physician services, emergency room, dental services, vision aids, prescription drugs, medical equipment and home care.

Occupational illnesses and injuries: From the *Recordkeeping Guidelines for Occupational Injuries and Illnesses,* the definition used by the Annual Survey of Occupational Illnesses and Injuries (ASOII) for occupational injury is any injury such as a cut, fracture, sprain, etc., which results from a work accident or from exposure involving a single incident in the work environment. Occupational illness is any abnormal condition, acute or chronic illness, disease, or disorder (other than occupational injury) caused by exposure to environmental factors (inhalation, absorption, ingestion, or direct contact).

Poverty level: Poverty statistics presented in this report are based on a definition developed by the Social Security Administration in 1964 and revised by Federal Interagency Committees in 1969 and 1980. The poverty index provides a range of income cutoffs adjusted by such factors as family size and number of children under 18 years old.

Rehabilitated: The successful placement of a client of a state Vocational Rehabilitation (VR) agency into competitive, sheltered, or self-employment, or homemaking or unpaid family work for a minimum of 60 days after the completion of all necessary rehabilitation services (see Vocational Rehabilitation).

Severe functional limitation: The Survey of Income and Program Participation (SIPP) regards a person who is unable to perform or needs the help of another person to perform one or more of a list of physical functional activities as having a severe functional limitation (see **Functional limitation** for list of activities).

Severe disability: Severe disability (SIPP) is defined as follows: People 15 and over were identified as having a severe disability if they were unable to perform one or more functional activities; needed personal assistance with an ADL or IADL; used a wheelchair; were a long-term user of a cane, crutches, or a walker; had a developmental disability or Alzheimer's disease; were unable to do housework; were receiving federal disability benefits; or were 16 to 67 years old and unable to work at a job or business.

Severe work disability: The Current Population Survey (CPS) classified persons as having a severe work disability if (1) they did not work in the survey week because of a long-term physical or mental illness that prevents the performance of any kind of work, (2) they did not work at all in the previous year because of illness or disability, (3) they were under 65 years of age and covered by Medicare, and (4) they were under 65 years of age and a recipient of Supplemental Security Income (SSI). See also **work disability**.

Social Security Disability Insurance (SSDI): A federal program in the Social Security Administration providing monthly benefits to disabled workers and their dependents. A person builds protection through employment covered under Social Security (compulsory tax on earnings). The disability definition is an inability to engage in substantial gainful activity because of any medically determinable permanent physical or mental impairment. Later amendments made the disability length of time necessary for eligibility to be at least five months.

Supplemental Security Income (SSI): This federally administered program provides the ability for an individual to qualify for payments based on age, blindness, or disability. The disability definition is any person unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment expected to result in death or that has lasted or can be expected to last for a continuous period of at least 12 months. Blindness refers to any person with 20/200 or less vision in the better eye with the use of correcting lenses, or with tunnel vision of 20 degrees or less.

Unemployed: Unemployed people include those who, during the CPS week, had no employment but were available for work and (1) had engaged in a specific job seeking activity within the past 4 weeks, (2) were waiting to be called back to a job from which they had been laid off, or (3) were waiting to report to a new wage or salary job within 30 days (see Labor force participation rate). The number of unemployed persons divided by the number of people in the labor force is the unemployment rate.

Vocational Rehabilitation: This refers to programs conducted by state Vocational Rehabilitation agencies operating under the Rehabilitation Act of 1973 to provide or arrange for a wide array of training, educational, medical, and other services individualized to the needs of persons with disabilities. The services are intended to help these persons acquire, reacquire, or maintain gainful employment. Most of the funding is provided by the federal government.

Work disability: Persons were classified as having a work disability by the Current Population Survey (CPS) if they met any of the following criteria: (1) had

a health problem or disability which prevents them from working or which limits the kind or amount of work they can do, (2) had a service connected disability or had ever retired or left a job for health reasons, (3) did not work in survey week because of a long-term physical or mental illness or disability which prevents the performance of any kind of work, (4) did not work at all in the past 12 months because of illness or disability, (5) under 65 years of age and covered by Medicare, or (6) under 65 years of age and a recipient of SSI (Supplemental Security Income) (see also Severe work disability), or (7) received veteran's disability compensation.

Work limitation: In the NHIS, a person can be described as having a work limitation if he or she described a chronic health condition that prevents performance of work at all, allows only certain types of work to be performed, or prevents him or her from working regularly.

Workers' compensation: A program providing benefits to persons injured or disabled while working.

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Website Addresses:

Website addresses are subject to change. The websites listed in this document are current at the time of this document's preparation. This publication, *Work and disability in the United States,* is also available on the InfoUse website which will be updated periodically:

http://www.infouse.com/disabilitydata/

Bureau of the Census:
http://www.census.gov/hhes/www/disable/cps
http://www.census.gov/hhes/www/disable/sipp

Centers for Disease Control and Prevention:
http://www.cdc.gov

Department of Labor, Bureau of Labor Statistics:
http://stats.bls.gov

Louis Harris Data Center:
http://www.unc.edu.depts.irss/lharris.htm

National Center for the Dissemination of Disability Research:
http://www.ncddr.org

National Center for Health Statistics:
http://www.cdc.gov/nchswww/index.htm

National Institute on Disability and Rehabilitation Research:
http://www.ed.gov/offices/OSERS/NIDDR/

University of California at San Francisco, Rehabilitation Research Training Center on Disability Statistics
http://www.dsc.ucsf.edu

West Virginia University:
http://www.icdi.wvu.edu/disability/tables

Appendix

This appendix provides information on the sources of the data, and limitations of each source. The major surveys used in this publication are the Survey of Income and Program Participation (SIPP), the National Health Interview Survey (NHIS), the Current Population Survey (CPS), the decennial Census, and the Annual Survey of Occupational Injuries and Illnesses (ASOII). These surveys provide the most current and comprehensive national numbers and estimates from respondent-based information. The National Organization on Disability/Louis Harris Survey was also used in this publication. Estimates from surveys are within the past eight years.

The following summaries describe the surveys, their sampling formats, the size of the respondent bases, and definitions of terms used in the surveys, including how disability is measured. More details can be found in the original publications.

The Survey of Income and Program Participation (SIPP) is a multipanel, longitudinal survey conducted by the U.S. Census Bureau. The data in this publication come from three SIPP files that are based on a number of overlapping waves and panels of the SIPP. These are:

File 1	1990 panel: Wave 6	1991 panel: Wave 3
File 2	1992 panel: Wave 6	1993 panel: Wave 3
File 3	1992 panel: Wave 9	1993 panel: Wave 6

The SIPP covers the noninstitutionalized population of residents living in the United States, and collects data on source and amount of income, labor force information, program participation and eligibility data, and general demographic characteristics. The SIPP also includes disability supplements that ask questions to determine individuals' disability status. Historical background and more detailed information on the SIPP can be found on the Internet at <http://www.sipp.census.gov/sipp>.

Survey design and sampling. The survey design is a continuous series of national panels in which the same households are interviewed every four months for periods ranging from 2 1/2 to 4 years. A cycle of four interviews covering the entire sample and using the same questionnaire is called a wave. Interviews are conducted by personal visit and by follow-up telephone calls. All household members 15 years old and older are interviewed if possible, and proxy response is permitted when individuals are not available for interviewing.

Respondents: In the three files of data used in this publication, sample size ranged from approximately 34,000 households for file 1 to 40,000 households for files 2 and 3. A rough estimate of the number of individuals interviewed would

be 85,000 to 100,000, based on an estimated average of 2.5 individuals per household.

Definitions. The questions that have been asked in the disability supplements of the SIPP were designed to be consistent with the definition of disability set forth in the Americans with Disabilities Act (ADA). People 15 years of age and older were considered to have a ***disability*** if they met the following criteria:

1. used a wheelchair or had used a cane, crutches or walker for 6 months or longer;
2. had difficulty performing one or more **functional activities,** such as seeing, hearing, speaking, walking, lifting or carrying 10 pounds, or climbing stairs;
3. had difficulty with one or more **activities of daily living (ADLs),** which include getting around inside the home, getting in and out of bed or a chair, bathing, dressing, eating or toileting;
4. had difficulty with one or more **instrumental activities of daily living (IADLs),** which include going outside the home, keeping track of money or bills, preparing meals, doing light housework or using the telephone;
5. was identified as having a developmental disability or a mental or emotional disability;
6. was 16 years or older and had a condition that made it difficult to do housework;
7. was between 16 and 67 years of age and had a condition that limited the amount or kind of work at a job;
8. was under 21 years and received developmental services or had limitations in usual activities such as schoolwork;
9. was under age 65 and covered by Medicare or received SSI.

Functional limitations are defined from the questions asked about the difficulty in performing basic activities such as seeing, hearing, having one's speech understood, walking, carrying or lifting 10 pounds or walking up a flight of stairs. ***Activities of Daily Living (ADLs)*** covered in the survey include getting around inside the home, getting in and out of bed or a chair, bathing, dressing, eating and toileting. ***Instrumental Activities of Daily Living (IADLs)*** covered in the survey include going outside the home, keeping track of money or bills, preparing meals, doing light housework and using the telephone.

The National Health Interview Survey (NHIS) is a principal source of information on the health of the civilian noninstitutionalized population of the United States that is conducted by the National Center for Health Statistics (NCHS). Each year, the survey consists of a basic set of questions on health,

socioeconomic and demographic items as well as one or more special questionnaires to obtain more detailed information on major current health issues. A disability follow-up special questionnaire was used in 1994-95. The NHIS also provides information about activity limitations and chronic conditions which are relevant to the topic of work and disability.

Survey Design and Sampling. The NHIS is conducted according to a multistage probability design, permitting continuous sampling of the civilian noninstitutionalized population living in the United States. Each weekly sample is representative of the target population and is additive with other weekly samples. Sampling is done throughout the year, preventing seasonal bias. Information is obtained about health and other characteristics of each member of the household. The usual sample size is approximately 50,000 households.

Respondents. The interviewed sample for 1993 was 109,671 individuals and for 1994 was 116,179 individuals (45,705 households). Response rates were approximately 95.6 percent in 1993 and 94.1 percent in 1994.

Definitions. The NHIS defines **chronic condition** as one that has lasted for three months or more, or that is on the NCHS list of chronic conditions regardless of onset. **Disability** refers to the state of being limited, due to a chronic mental or physical health condition, in the type or amount of activities. The NHIS has three measures of disability: 1) **limitation in major activity,** 2) **limitation in work**, and 3) need for personal assistance with **activities of daily living**. For working-age people, 18-69 years of age, the NHIS defines the major activity as working or keeping house.

The Current Population Survey (CPS) is a monthly survey conducted by the U.S. Census Bureau which deals mainly with labor force data for the civilian noninstitutionalized population. The data presented in this publication are from the March Income Supplement, in which questions related to labor force participation and income are asked of all members of the household 16 years of age and older.

Survey Design and Sampling. The sample of approximately 60,000 is selected to be representative of the entire population of the United States, and numbers are "weighted" or adjusted to independent population estimates based on the results of the decennial Census. These weights take into account age, gender, sex, race, Hispanic origin and state of residence.

Respondents. About 60,000 households were eligible to participate in the survey, representing about 1 in every 1,600 households in the country.

Definitions. Work disability is the only disability measured by the CPS. People are classified as having a work disability if they:

1. have a health problem or disability which prevents them from working or limits the kind or amount of work they can do; or
2. ever retired or left a job for health reasons; or
3. did not work in the survey week because of long-term physical or mental illness or disability that prevents the performance of any kind of work; or
4. did not work at all in previous year because of illness or disability; or
5. are under 65 years of age and are covered by Medicare; or
6. are under 65 years of age and a recipient of Supplemental Security Income (SSI); or
7. received veteran's disability compensation.

The Decennial Census ("The Census") has been conducted every 10 years since 1790. Data in this publication are based on the 1990 census. The Census seeks to simultaneously enumerate all individuals in the United States. Census forms are mailed out and interviewers dispatched to residential addresses, and the Census questionnaire includes questions about both the condition of the housing unit and its occupants.

The "short form" of the 1990 Census asked 7 population and 7 housing questions, and was intended to be completed by all households (100% sample.) The "long form" of the Census contained all of the short form questions and many other questions and was distributed to a sample of the United States population. Questions about disability are contained in the long form of the Census. Data from the decennial Census are used to weight the sample results of the SIPP and the CPS on age, sex, race, and Hispanic/non-Hispanic categories.

Survey Design and Sampling. The short form of the decennial Census, which is used to weight other surveys, does not sample from the population, but rather seeks to enumerate the entire population of the United States. About 106 million housing units received the short form. The long form of the Census, which includes disability questions, was distributed to 17.7 million housing units. The Census samples according geographical areas, and smaller, less populated areas are sampled more heavily than densely populated urban areas. The Census also conducts a Post-Enumeration Survey which is used to estimate the degree to which the Census over- or under-counts the population.

Respondents. The total population count of the 1990 Census was 247.8 million people. Researchers estimate that the Census undercounted the population by 4 - 5.3 million people, based on the results of the Post-Enumeration Survey (Hogan, 1993). The under-count is proportionally larger for certain groups of people (particularly ethnic minorities, and people with low income or low educational level) and for certain geographical areas (Barrett, 1994).

Definitions. **Disability**, according to the 1990 Census, is defined by answers to the following questions. The **work disability** question is the same as in the 1980 Census. People were asked whether they had a physical, mental or other health condition that limited the amount or kind of work they could do, prevented them from working, or prevented them from using public transportation. A question about **functional disability**, which was new to the 1990 Census, asked whether any person in the household had a health condition that limited his or her ability to go outside the home alone or caused difficulty in taking care of personal needs such as bathing, dressing, or getting around inside the home. (Barrett, 1994).

The Annual Survey of Occupational Injuries and Illnesses (ASOII) collects data on work-related injuries, illnesses and fatalities for the Bureau of Labor Statistics from a random sample of 165,000-280,000 private industry establishments. (Sample sizes vary from year to year.) The sample excludes employees in government agencies.

The annual survey provides estimates of the number and frequency (incidence rates) of workplace injuries and illnesses based on logs kept by private industry employers during the year. These records reflect not only the year's injury and illness experience, but also the employer's understanding of which cases are work-related under current recordkeeping guidelines of the U.S. Department of Labor. The number of injuries and illnesses reported in any given year also can be influenced by the level of economic activity, working conditions and work practices, worker experience and training and the number of hours worked.

Survey Design and Sampling. An independent sample is selected for each state. The sample design is based on the total recorded case incidence rate. The sample is stratified by industry categories based on the 1987 Standard Industrial Classification (SIC) Manual.

Respondents. In 1995, the survey covered about 280,000 private establishments, representing about 83 million workers in the private sector.

The National Organization on Disability (NOD) /Harris Survey on Disabilities reports on a poll commissioned by the National Organization on Disability and conducted by Louis Harris and Associates. It is the second major national survey to study the attitudes and experiences of Americans with disabilities. Using a nationwide cross-sectional sample of the population with disabilities, issues such as employment, lifestyles, political and religious participation, home computer use and the education of children with disabilities were investigated. Twenty-five minute interviews were conducted by telephone with eligible respondents. All interviews with the disabled population were conducted from February 4, 1994 to March 3, 1994. Interviews with the non-disabled population were conducted from April 4-7, 1994.

Survey Design and Sampling. Louis Harris and Associates screened more than 20,000 household randomly in the general population in order to generate a sample of 1,021 adults with disabilities aged 16 and over. The survey is based 1,021 telephone interviews. A minimum number of interviews were conducted among adults with disabilities in each of the following age groups: 16 to 24 years, 25 to 54 years and 55 years and older. This allowed the appropriate balance of interviews with working-age people with disabilities. The data were then weighted to their proportions in the population. In addition, a national sample of 1,115 adults without disabilities were asked a number of the survey questions in order to provide a comparison to the non-disabled.

Respondents. All respondents in the disability sample met at least one of the definitional criteria listed below under definitions. A total of 1,021 individuals with disabilities were interviewed.

Definitions. This survey defined **disability** in the same fashion as the 1986 survey. A person was included in the sample of adults with disabilities if he or she:

1. had a disability or a health problem that prevented him or her from participating fully in work, school or other activities,
2. said that he or she had a physical disability, a seeing, hearing or speech impairment , an emotional or mental disability, or a learning disability; or
3. considered him- or herself to have a disability or said that other people would consider him or her to be a person with a disability.

★ U.S. GOVERNMENT PRINTING OFFICE: 1998 – 623-165/93472